

Heathrow Strategic Capital Business Plan 2013

Prepared by Development
June 2013

Table of Contents

1. Introduction and Context	4
1.1 Foreword.....	4
1.1 Purpose	5
1.2 Introduction	5
2 Regulatory Years	5
3 Q5 Delivery	6
3.1 Q5 Programme Delivery	6
3.2 Q5 Extension Year Programme Delivery.....	7
Projects in the Plan	7
3.3 T2 Programme	7
3.3.1 Overview and List of Projects	7
3.4 Western Baggage Product Programme.....	8
3.4.1 Overview and List of Projects	8
3.5 Terminal Restoration and Modernisation (TRM) Programme.....	9
3.5.1 Overview and List of Projects	9
3.6 Airport Capacity Optimisation Programme.....	10
3.6.1 Overview and List of Projects	10
3.7 Portfolio of Projects.....	11
3.7.1 Overview and List of Projects	11
3.8 Programme Identification	12
3.8.1 Overview and List of Projects	12
3.9 IT / Systems Programmes.....	12
3.9.1 Overview and List of Projects	12
3.10 Surface Access.....	14
3.10.1 Overview and List of Projects	14
4 Masterplan and Land Use Plan	14
4.1 Risk and Assumptions.....	17
5 Scenarios for Development	17
6 Airport Operating Costs	18
7 Airline Relocations	18
8 Regulatory and Legislative Contexts	20
8.1 Aviation and Airport Policy	20

8.2 Current and Future Regulation	20
8.3 Other Relevant Issues	20
8.3.1 Town and Country Planning System	20
9 Trigger Milestones.....	22
9.1 Overview.....	22
9.2 Current Status of Triggers (March 2013)	23
9.3 Trigger Change Control.....	24
10 Consultation on Capital Development Projects.....	25
10.1 Stakeholder Programme Boards.....	25
10.2 CIP Working Group	25
10.3 Consultation at Gateways.....	25
10.4 Change Control	26
10.5 Project for the Sustainable Development of Heathrow (PSDH)	26
Technical Notes.....	27
Project Definition Sheets.....	27
Work Breakdown Structure.....	27
Price Base	28
Projects for the Sustainable Development of Heathrow (PSDH).....	30
Appendix A: Terminal 2 Programme	31
Appendix B: Western Baggage Product	79
Appendix C: Terminal Restoration and Modernisation	116
Appendix D: Airport Capacity Optimisation.....	176
Appendix E: Portfolio of Projects.....	222
Appendix F: Programme Identification.....	265
Appendix G: IT / Systems Programmes.....	277
Appendix H: Surface Access	316
Appendix I: Equitable Treatment Metrics.....	329
Appendix J: Cost Schedule	332
Appendix K: Tracker	336
Appendix L: Triggers	360
Appendix M: Q5+1 Spend (Version 26)	361

1. Introduction and Context

Foreword

Q5 has seen significant progress at Heathrow on our construction sites, in our terminals, in constructive engagement with our stakeholders, in the way we manage projects, and how we deliver value for money. Our first priority has been to deliver everything we do safely and securely, our second has been to make every passenger's journey better through our development projects, working with our stakeholders.

We have re-engineered the way we manage Development, to become better aligned with the needs of the business and reduce cost through an approach we call the "intelligent client". Major programmes are now governed by the operational leaders of Heathrow, in consultation with stakeholders, with better business cases and understanding of the benefits.

Following the demolition of the Queen's Building, we commenced construction of Terminal 2 in 2009 and have achieved all milestones to date. One key milestone was the new Terminal 2 building (T2A) being declared weather-tight, and we marked the achievement in a ceremony attended by the Secretary of State for Transport. In September 2012, Terminal 2's satellite pier (T2B) reached the same milestone. When Terminal 2 opens in 2014, two thirds of all passengers will travel through new terminals, which will change the face of Heathrow and move us closer to our Masterplan.

Heathrow has completed a complex series of refurbishment projects to transform Terminals 1, 3 and 4 for the future needs of passengers and of our airline customers - these have allowed more than half of our airlines to successfully move into new facilities.

In 2011, T5C was opened to passengers and construction was completed on the new automated baggage link between Terminals 3 and 5, and construction of T3 Integrated Baggage commenced. These projects will allow better connection times for passengers and bags and reduced baggage misconnects, supporting our vision of becoming Europe's hub of choice.

Last summer, Heathrow was proud to play its part in London 2012, providing the expertise to build the much-acclaimed departures terminal through which athletes checked-in on the busiest days following the Games. Across the airport our teams collaborated with their operational colleagues to ensure that construction works were completed or suspended before the summer so that passengers enjoyed the best possible experience throughout the Games period.

Whilst reflecting on the achievements so far in Q5, I look forward to building upon the successes to ensure the efficient, on-time and most importantly safe delivery of our commitments to our passengers, stakeholders and shareholders, continues.

John Holland-Kaye
Development Director

1.1 Purpose

Heathrow Airport's Strategic Capital Business Plan (SCBP) is delivered annually in accordance with regulatory requirements.

SCBP 2013 provides an update on Q5 activity to the airline community to facilitate consultation on Capital Investment at Heathrow, and should be read in conjunction with the Q6 Revised Business Plan. Where airlines require further information to understand proposed investments, Heathrow will endeavour to respond to these requests.

The SCBP 2013 is a document for consultation; therefore Heathrow encourages the airline community and its stakeholders to submit their views on the SCBP by *30th August 2013* to Seema_Salan@Heathrow.com.

1.2 Introduction

SCBP 2013 outlines the capital investment projects currently being delivered by Heathrow for the Q5 regulatory period, April 2008 to March 2014, which includes the extension year (Q5 + 1).

Heathrow would like to thank the airline community for their response to the SCBP 2012, which has helped to develop the 2013 SCBP.

2 Regulatory Years

Q5 and Q5 + 1

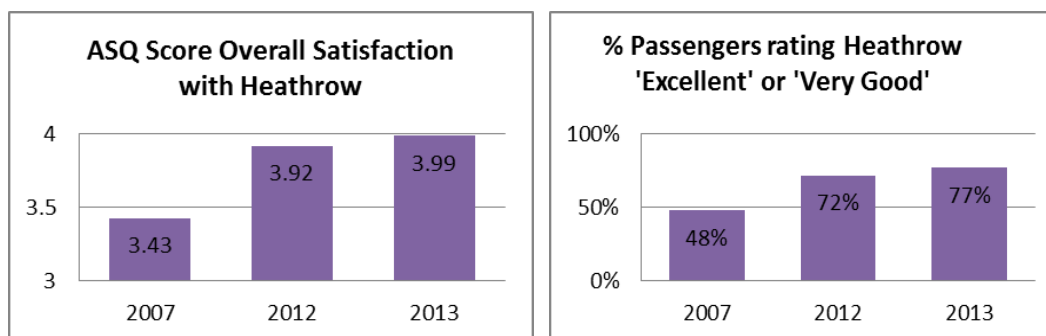
At the beginning of Q5, a total capital budget of £4,542 million (2007/2008 prices) was set by the CAA for investment, following Constructive Engagement. In June 2012, the CAA supported the Q5 budget increase of £735 million (2007/2008 prices) to take into account the extension of Q5 by one year (Q5+1), to March 2014. This brought the total budget for the 6 year Q5 to £5,277 million (2007/2008 prices).

Heathrow has invested an average of £906 million per year through Q5; with a 2012 / 13 spend of £1.2 billion, to improve passenger experience, enhance resilience, provide additional capacity, and to drive down costs at Heathrow. This investment has comprised a number of significant infrastructure projects, including the new Terminal 2, a second satellite for Terminal 5 and the new cross-campus baggage connectivity system. Existing facilities across the airport have also been modernised, and this redevelopment will continue through the Terminal Restoration and Modernisation Programme, as outlined in Section 3.5.

Heathrow will end Q5 with a significantly improved passenger experience. Passenger satisfaction at Heathrow improved to the highest ever passenger rating of 3.99 in Q1, 2013¹. This strong performance has raised the Moving Annual Average (MAA) to 3.95, also a record high. Passenger Satisfaction during London 2012 was particularly strong when Heathrow achieved its best ever performance in both ASQ and QSM, further demonstrating the benefits of forward planning and collaboration with the Airline Community.

¹ ASQ – ACI's Airport Service Quality survey Q1 2013 – the most comprehensive measure to compare Heathrow's performance.

Figure 3.1: Improvements to passenger satisfaction²



A major milestone for Heathrow will be the completion of Terminal 2 construction in November 2013, the largest programme in Q5. The new facilities will be ready for operational use in Summer 2014. Terminal 2 will be home to Star Alliance, Aer Lingus and Virgin Atlantic's domestic routes.

During Q5, Heathrow has continued to develop its hub capability by strengthening resilience in three areas: stand supply, transfers and airfield performance. New stands have been delivered for T5, T3 and T2B Phase One, making it easier for Heathrow to accommodate the evolving aircraft fleet mix at Heathrow. These improvements have largely been delivered by the Airport Capacity Optimisation programme. This programme will also deliver improvements in passenger experience, as outlined in Section 3.6.

The Portfolio of Projects programme is making major improvements across Heathrow by delivering projects that include completing the refurbishment of the Terminal 3 roof, the enabling work for refurbishment of the main and cargo tunnels into the Central Terminal Area, and by making improvements to the storm-water management systems. A detailed overview of this programme is provided in Section 3.7.

The Heathrow Airport 2 Runway Masterplan Vision has been published, replacing the 2005 Interim Masterplan. This is further detailed on page 14.

3 Q5 Delivery

3.1 Q5 Programme Delivery

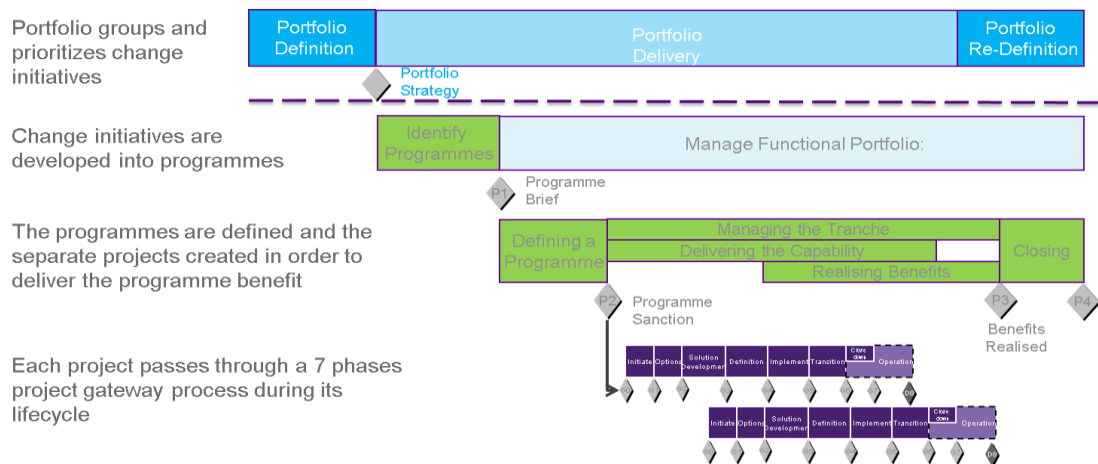
The Q5 delivery programme is now in its sixth and final year; Q5 + 1. To enable successful delivery of the capital investment detailed in this SCBP, Heathrow divided the overall plan into Programmes, and re-engineered the organisation to reduce overhead and improve delivery of business benefits.

A new process framework which has been embedded consists of a Portfolio, under which sit Programmes, and the Projects within each programme. This new process supports delivery of Heathrow's vision, and is aligned with industry best practice. The figure below illustrates the new process.

² Figure 3.1 illustrates that today, 77% of passengers rate Heathrow as either excellent or very good. This compared to only 54% at the start of Q5. The overall satisfaction has improved by 19 percentage points and excellent / very good ratings by 50% since the start of Q5.

Figure 3.2: New Programme Approach

The portfolio / programmes / project approach



3.2 Q5 Extension Year Programme Delivery

In March 2011 the CAA confirmed that it had decided to extend Q5 to March 2014, exercising their right to do so under Section 40 of the Airports Act 1986. This extension allowed the Civil Aviation Act to come into force, prior to the CAA determining the terms for the Q6 regulatory period.

In 2011, Heathrow consulted with the Airline Community to finalise the Q5 extension year programme and the appropriate capital expenditure triggers that should apply. The Q5 + 1 Working Group was established and chaired by IATA, and included representatives from Heathrow and the airline community. The capital plan was endorsed by the Joint Steering Team on 11 June 2012, and was subsequently acknowledged by the CAA in August 2012. The Q5 + 1 Capital Plan can be found at Appendix M.

The capital plan agreed, fully utilises the £735 million (2007 / 2008 prices) cap on expenditure agreed, which is equivalent to £960 million in outturn.

Projects in the Plan

There are currently eight programmes of capital investment in Q5 that will collectively deliver both an enhanced experience for passengers, and a more competitive hub airport proposition for Heathrow’s airline customers.

3.3. T2 Programme

3.3.1. Overview and List of Projects

Heathrow’s £2.5bn³ Terminal 2 Programme provides a new terminal to replace the out-dated Terminal 2 and Queen’s Building facilities. In addition to improving passenger

³ Terminal 2’s £2.5 billion figure includes Q6 expenditure.

experience, connectivity will be improved by co-locating STAR Alliance airlines. The programme includes:

- A new terminal T2A with 8 code C and 2 code F stands.
- A new satellite pier T2B with 6 code E and 10 code F stands.
- A new multi storey car park with direct access to the terminal.
- A reconfigured road layout to give passengers a more free-flowing journey around the Central Terminal Area and into Terminal 2.
- A new Cooling Station and Energy Centre built to sustainable principles.
- The departing and transfer baggage system will be an upgraded T1 system; the arrival system will be in T2.

Below is a list of live projects which are over £3 million in value (nominal) at March 2013:

BCT Number and Project Name as presented in Appendix A:

9351	T1 Baggage Prolongation Programme
10309	T2 Phase 1 Baggage (T1 Transitions)
8802	T2A Building and Stands
4201	T2B Phase 2
7209	T2B Apron
9805	T2 ICS
3814	MSCP 2
9723	T2 Ancillary Accommodation

3.4. Western Baggage Product Programme

3.4.1. Overview and List of Projects

Western Baggage Product includes the Terminal 3 Integrated Baggage system, T5 Western Baggage Upgrade (with associated baggage IT projects) and a portfolio of smaller projects across the campus.

The T3 Integrated Baggage System (T3IB) will replace the life expired, stand-alone, baggage infrastructure in Terminal 3 with a modern, integrated, baggage facility for the Terminal 3 airline community; it will also improve minimum connect times and baggage misconnect rates. The structure of the building is now complete, the cladding is progressing, and the link bridge (from the facility to the main terminal building) is now installed. Installation of the baggage systems commenced on schedule and two remote arrivals offloads were returned to service in July 2012, to protect the operation for the Olympics. The completion date of September 2014 for construction, baggage, testing and commissioning works, remains achievable and is being maintained. Over 40 airlines have toured the T3IB site and the 'Roadmap to Operational Use for the Airline Community' was agreed in November 2012, with compressed build trials taking place in T3 and T5 in October / November 2012.

T5 Western Baggage Upgrade (T5WBU) will bring the Terminal 5 Baggage System into a common operating platform with the T5 – T3 baggage tunnel and the future T3IB system, and is a significant step to enabling the integration of baggage systems across the campus, along with Heathrow Integrated Baggage System (HIBS). The project successfully delivered the first production software into the Integrated Test Facility (ITF) to plan.

In 2012 the T5 to T3 section of the Post T5 Transfer Baggage System went live, improving the operational performance of transfer baggage between the two terminals, and reducing the number of manual handling interventions by circa 12 million annually. The T3 and T4 Standard 2 Hold Baggage Screening (HBS) replacement projects successfully delivered the new HBS equipment into operation ahead of the DfT deadline of 1st September 2012.

Below is a list of live projects which are over £3 million in value (nominal) at March 2013:

BCT Number and Project Name as presented in Appendix B:

3801	T3 Integrated Baggage System
10712	T3IB Transfer Docks Relocation
9992	Heathrow Integrated Baggage System (HIBS)
10658	T5 Western Baggage Upgrade
10662	T5 Early Bag Store Capacity Increase
10545	T4 APV HBS Replacement

3.5. Terminal Restoration and Modernisation (TRM) Programme

3.5.1. Overview and List of Projects

The Terminal Restoration and Modernisation Programme (TRM) includes asset replacement and terminal upgrades, improved staff experience through upgrades of operational support and 'back of house' areas, and realises retail growth opportunities.

In Terminal 3, further refurbishment works have been undertaken in the check-in and departure areas, as well as enhancements to the landside arrivals in time for the Olympics. The Terminal 3 south wing office block heating and ventilation system has been replaced, and porches on check-in doors A and B have been installed. Over the next year further works to the departures lounge ceiling will be delivered, along with a refurbishment programme of walkways and gate rooms in Piers 5 and 7.

In Terminal 4, the departures lounge has been refurbished, with a new ceiling and LED lighting system. A number of lifts, passenger conveyors and air bridges have been replaced, and a new CIP lounge was delivered for Air India. Further air bridge replacements are planned for 2013 and the North East end of the departure lounge will be refurbished, which will include the development of additional food and beverage outlets.

In Terminal 5, additional capacity in the southern security area has been delivered; and in 2013, a project will commence to improve and increase the luxury retail offer at the southern end of the Terminal.

Across Heathrow's passenger security areas we have undertaken a project to reconfigure search areas, remove a number of archway metal detectors, realising staff cost savings. This project has also achieved opex savings by automating ticket presentation processes. In 2013, enhanced security lane equipment is being introduced to improve passenger experience and security capability. Significant Wayfinding improvements are also being made across the Terminals and will be completed in Summer 2013.

Below is a list of live projects which are over £3 million in value (nominal) at March 2013:

BCT Number and Project Name as presented in Appendix C:

10829	TATPJ Intellectual Project
10664	Proof of Concept Self Bag Drop
9105	New Model Line (formerly ATRS)
10666	Wayfinding Strategy Initiative
10711	T3 Refurbishment Programme
10653	PRM Lifts
10554	T3 South Wing HVAC Replacement
10652	T3 CIP Lounge Remedial Works
9644	T4 Departures Phase 2
9844	T4 Airbridge Replacement
9575	T5 CSA and Connections Capacity
10232	2011 - 2012 Minor Projects
10692	Fast Track Upgrade

3.6. Airport Capacity Optimisation Programme

3.6.1. Overview and List of Projects

The Airport Capacity Optimisation Programme looks at all aspects of Heathrow's operation with a view to improve resilience and capacity, and so deliver an enhanced passenger experience. The Programme's vision is that Heathrow Airport is recognised as an airport which operates with a smooth operational flow within its statutory limits.

This programme will make the Heathrow Operation more predictable, in conjunction with increasing its ability to accommodate the predicted airline's fleet changes. Changes to both infrastructure and process are required to enable the consistent delivery of the forecast daily schedule. This will bring benefit to Heathrow in the form of increased passenger numbers, smoother flow, and efficient use of resources, reduced CO2 emissions, and airline benefits of reduced fuel burn. Also, this will enable a quicker return to 'business as usual' activities in times of disruption.

Over the past year, the programme has been reviewed to ensure that all the scope aligns to the overall Strategic aim. As such, the programme is now split into 4 initiatives:

1. Airfield Operational Efficiency: - This initiative contains all the projects currently being delivered by the Heathrow Resilience project which aims to deliver improved infrastructure, process and IT capability across the airfield and in our airspace. The largest area of Capital spend is devoted to the infrastructure works following the end of the Cranford Agreement to eventually allow Easterly Departures off the Northern Runway. This includes changes to the taxiway system to the Northern and Southern Runways. The first phase of the works (Northern taxiway link 60) is complete, with Southern Rapid Exit Taxiway (RET) being delivered as part of the Runway resurfacing works, and the Rapid Access Taxiway (RAT) being delivered later.
2. Terminal & Airfield Capacity: - This initiative aims to deliver the infrastructure required to meet our long term demand for aircraft at Heathrow, and to ensure the right capacity across the terminals. The key projects within this initiative are related to increasing A380 Capability (T3 Pier 5 phase 2, stand 340, Western

Campus (T4) A380 stands, Sierra Taxiway upgrade, 4th FEGP for A380 stands) and other core infrastructure developments required for the future e.g. T4 Baggage Hall Expansion.

3. Snow Operations: - The first 2 phases of this work have already been completed, and this includes purchasing snow vehicles and creating the initial facilities in snow base. These initial facilities will now be made permanent so that they are robust for all future Winter Operations.
4. Airport Operational Control: - The last initiative within the programme relates to the day to day running of Heathrow's operation and aims to deliver control rooms that better manage the flow. The two main projects in this initiative are: Airport Operational Centre (APOC) and Baggage Combined Control Centres.

Below is a list of live projects that are over £3m in value (nominal) at March 2013:

BCT Number and Project Name as presented in Appendix D:

9501	Heathrow Resilience
3871	Baggage Combined Control Centres
10749	Airside Operational Building
10857	T3 Additional PCA Infrastructure Project
10377	T4 ABF 1-75 (Phase 2)
10429	T4 Baggage Reclaim Hall Expansion
10448	T5 TTS Enhancements
10495	Stands Infrastructure
10682	T3 Pier 5 Capacity Phase 2-3
10802	Loading Bay Enhancements T3 & T4

3.7 Portfolio of Projects

3.7.1 Overview and List of Projects

The Portfolio of Projects comprises projects that are not covered by the strategic programmes. Projects are driven by issues such as regulatory compliance, airport environmental strategy, safety issues or major asset replacement. Although the individual projects do not create business change outcomes or over-arching strategic benefits, there are opportunities to be realised from managing these projects as a portfolio. Combined procurement opportunities are explored, knowledge and expertise is shared across the team, and the Sponsoring Group ensures that appropriate governance is applied.

The resurfacing of the Southern Runway is a major element of the Portfolio for the remainder of the year. Other projects within the programme include:

- Completion of the refurbishment to the Terminal 3 roof;
- Completion of the design and procurement work for the refurbishment of the main and cargo tunnels into the central terminal area;
- Improvements to the storm-water management systems to reduce the impact of the airport's surface water run off on the local rivers and waterways, including the improvement of waste away facilities for Heathrow's airside and landside road sweepers.

- General repair works to the taxiways and Cul de Sacs which will see the tug road on the South East of the airport renovated.
- Purchase of both new fire appliances for the airport, the new passenger baggage trolleys for T2 and the replacement of those life expired in the Central Terminal Area.

Below is a list of live projects which are over £3 million in value (nominal) at March 2013:

BCT Number and Project Name as presented in Appendix E:

3353	Major Fire Appliance Replacement
4185	VIP Infrastructure
3809	Runway Rehabilitations Project
6793	Heathrow Storm Water Catchment
7718	Eastern Maintenance Base Re-development
9301	Tunnels Refurbishment
9843	Low Cost Security Projects
8857	Taxiway / CDS Rebuilds (Q5)
10806	Core Electrical Distribution Upgrades
10797	AGL Control System
10796	Heathrow Sweeper Tip Facility
10668	CO2 Energy Demand Management
10625	Terminal 3 Roof Refurbishment
10678	Q5 Portfolio of Projects Development

3.8 Programme Identification

3.8.1. Overview and List of Projects

This programme undertakes design works for potential future investment solutions and helps facilitate the prioritisation of Q5 funds across the capital portfolio as necessary.

Below is a list of live projects which are over £3 million in value (nominal) at March 2013:

BCT Number and Project Name as presented in Appendix F:

10792	Q6 Design Allowance
10472	Post Q5 Solutions D&D Studies
7720	T2A Phase 2

3.9. IT / Systems Programmes

3.9.1. Overview and List of Projects

The scope of IT Capital Investment Plan encompasses IT projects which are delivered through the Business Systems, Baggage, Airport Resilience and Passenger Experience Strategic Programmes. The vision is as follows:

- To deliver fit for purpose & secure IT infrastructure to support day to day operations and the requirements of the strategic programmes.

- Simplification of business processes and better information to support an efficient, customer focused back office.
- To drive innovation through technology across all programmes

The remaining Q5 investment will focus on delivering one or more of:

- Reduced risk, including improving resilience and compliance.
- Lower cost.
- Improved efficiency and effectiveness.

The key strategic IT initiatives under the Business Systems Programme for delivery in the remainder of Q5 and Q5+1 are as follows:

- **Infrastructure** - Implement a refresh of key components of Heathrow's core Technology Infrastructure and business support systems to keep the airport operational, mitigate the risk of IT failure, avoid non-compliance with regulation or aviation laws, and to limit operational expenditure increases.
- **IT Security** - Implement an agile, transparent IT security control environment within Heathrow that will provide protection by adequately and measurably responding to today's complex Cyber threat environment.
- **Innovation** - To capture ideas, stimulate innovation and facilitate pioneering solutions to products, processes or services in order to meet Heathrow's business challenges.
- **Document Management** – Develop and implement the Document Management platform and data migration.
- **Asset Management** - The objectives of the project are to implement Maximo v7.5, in order to deliver a fully supported and up to date asset management system with minimal enhancements.
- **Business & Strategic Information Systems** -Heathrow has the information and systems available to enable the business to operate effectively and make good, timely decisions to ensure that the right ways of working / culture are supported by processes and systems. This will aim to eliminate poor business processes as far as possible and transactional activity is further automated.
- **Programme Controls** - Enhance programme management performance through delivering robust programme and project controls for effective management of the risks and complexities associated with delivering the Heathrow Capital Investment Programme.

Below is a list of live projects that are over £3m in value (nominal) at March 2013:

BCT / Op. Number and Project Name as presented in Appendix G:

25824	Asset Management
30420	Data Optimisation
9825	Computer Room Remediation
9826	Programme Controls
9992	IT Baggage Phase 1
30054	IT Security Programme
9821	Radio Systems Programme
30422	Q5+1 Desktop and Mobile Infrastructure Services
25397	T3P6 Equipment Room Move
30517	Wide Area Mobile Data

3.10. Surface Access

3.10.1. Overview and List of Projects

The Surface Access programme is designed with the following objectives:

1. Continue the mode shift from car to rail, for both passengers and employees
2. Reducing emissions
3. Reducing road congestion
4. Enhance passenger experience by reducing the journey anxiety, through:
 - a. Integrating with aviation
 - b. Providing frequency, certainty, reliability
 - c. Quality service

The Programme comprises of approximately 50 projects, and these projects have been rolled into key categories according to type.

BCT Number and Project Name as presented in Appendix H:

10146	Fleet Modernisation & Connect
Various	HEx Growth Projects
Various	HEx Asset Replacement

4 Masterplan and Land Use Plan

The Heathrow Masterplan is a long-term vision illustrating the development of Heathrow over a period of time. It provides the basis for consultation on the long term vision for the capital development of the airport, and is reviewed regularly with the airlines.

The Airport Masterplan gives Heathrow an agreed goal for transforming the airport layout to improve passenger experience, drive out operational inefficiencies and enable growth in aircraft size.

The Masterplan is the result of extensive consultation with internal airport stakeholders. In May 2012 Heathrow published – with the broad support of the airport community –

the Heathrow Airport 2 Runway Masterplan Vision, which replaces the 2005 Interim Masterplan.

The Masterplan now rationalises passenger processing capacity into two buildings between the runway. It also removes current cul-de-sacs to provide a flow-through taxiway system, more stand frontage and a greater number of stands suitable for accommodating Code F aircraft.

This approach brings the following headline benefits:

- Improved passenger experience, fuel costs and CO₂ emissions delivered by reduced taxi time delays;
- Improved passenger experience by removing time-expired passenger processing facilities and replacing them with newer, efficient and attractive buildings;
- Increased revenues by increasing passenger throughput as a result of enabling larger aircraft to be used at Heathrow; and,
- Improved ability to compete as an international hub airport by reducing transfer times as a result of consolidating alliance partners.

The Masterplan remains a live document which we will review annually to ensure it continues to reflect changes in business and industry requirements and the realities of delivered projects. In 2012, the Masterplan was updated to reflect the impact of British Airways acquiring bmi and the scale of the future Oneworld operation.

The key change was to provide an enlarged T2 Campus in lieu of an extension to T5. Some key opportunities were identified, such as improved buildability, phasing and overall cost reductions. Again, this work was fully consulted with the airlines and in May 2012 this updated version of the Masterplan was issued as a basis for future infrastructure planning.

A land use plan is an integral part of the Heathrow Masterplan. This considers all the functions that need to be supported on the airport, and the space required to facilitate the increased passenger throughput predicted by 2035. It then rationalises and consolidates land use to optimise three key outcomes:

- Adequate operational space;
- Single-till income benefit realisation through appropriate airport-related commercial development; and
- Improvement of the airport's visual amenity in key areas.

The land use plan will be revised in response to the updated Masterplan by 2014.

Figure 3.1: Heathrow in 2011



Figure 3.2: Updated Airport Masterplan: Heathrow in 2012 + >20 years



4.1 Risk and Assumptions

The risks and assumptions which underpin long term development plans are built into future forecast flight schedules which Heathrow uses to model. The assumptions in Heathrow's model may change to reflect possible future process changes, and risks are measured through sensitivity analysis.

Cargo

Heathrow's role in the Cargo operation is to provide infrastructure that enables airlines and cargo handling companies to operate efficiently and competitively. Transit sheds and other cargo warehouses are not owned by Heathrow. Therefore the focus is to ensure that different zones are managed securely, and both the control posts and road system are fit for purpose and support the required levels of service.

5 Scenarios for Development

Last year's SCBP summarised the three scenarios for development which Heathrow could follow; these scenarios largely defined the speed of the Masterplan implementation and were published in the Strategic Options Plan.

It is only through the evolution and transformation of the airport that Heathrow can meet the needs and demands of the airport users and community; and this is through driving out operational inefficiencies, and bringing further terminal and airfield capacity on-stream.

Heathrow will continue to improve the airport through its programmes, with passengers and airlines seeing the benefits of the improvements in a reasonable timeframe.

Heathrow continues to provide an equivalent basis for airline operations, and this will enable airlines to compete effectively. This is demonstrated in the current ongoing programmes. Therefore pursuing a Masterplan is, and will continue to be an important element of Heathrow's strategy.

6 Airport Operating Costs

Q5 to 2011/2

During Q5, overall operating costs have fallen by £41 million per annum between 2008/9 and 2011/12 (2011/12 prices). This figure includes a number of positive impacts:

- £19 million on staff costs due to the implementation of a number of efficiency projects including simplified management structures, lower overtime and reduced staff related costs (the consequences of closing the Defined Benefit (DB) pension scheme and pay and bonus restraint);
- £11 million on maintenance costs due to savings from a number of procurement and efficiency initiatives; and,
- £8 million on police costs following implementation of a new agreement with the Metropolitan Police.

In terms of operating cost performance, compared to the CAA Q5 decision, by 2011/12 Heathrow effectively achieved the 1.5% per annum underlying cost reduction included in the CAA decision. This has been achieved in addition to addressing the loss of the economies of scale of managing two major airports – as a consequence many central overhead costs that were once shared are now borne solely by Heathrow. The achievement of the 1.5% per annum underlying cost reduction, therefore, includes the amount by which Heathrow has been able to rescale its cost base.

Remainder of Q5+1

For the remainder of Q5 and the extension year Heathrow has sought initiatives which will continue to improve the efficiency of the cost base. These include:

- Security and staff costs: £12 million;
- Contract and management efficiency, including ANS (Aerodrome Navigation Services): £9 million; and
- Overheads: £5 million.

7 Airline Relocations

Airline Relocation is the term used to describe the activities involved in an airline moving its flight operation from its existing terminal at Heathrow to another terminal, or to facilitate the introduction of new airlines into Heathrow.

The objective of the Airline Relocation team is to ensure that airlines and / or 3rd parties are ready and able to operate in a new Terminal or at Heathrow for a new entrant, without negatively impacting the performance of the Terminal and other users. The processes used to achieve this are the same as those identified in the transition stage of a project – the Operational Readiness period. Effectively this is the integration and assurance of Facilities, People, Process and Systems. Operational Readiness is driven by the mitigation of risk following change.

The Airline Relocations Programme has been recognised by the airlines as successful, with the majority of Heathrow's airlines moving terminal during Q5.

During Q5, many of the airline relocations were required for two main reasons:

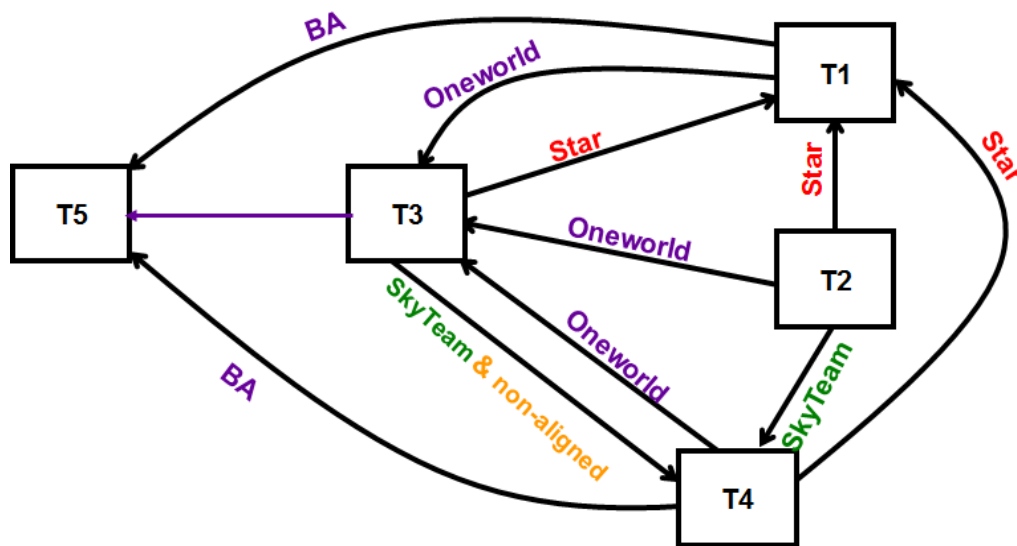
1. BA's occupancy of Terminal 5, moving from Terminal's 1 and 4 in 2008; resulting in the opportunity to move airlines into Alliance homes.

2. The subsequent requirement to decant the old Terminal 2 and Queen's Building, to allow the T2 Replacement Programme to commence.

This highly complex programme has benefited from significant learning taken by Heathrow and the airlines from the first phase of relocations to Terminal 5 during Q4. During the most intensive stage, 30 airlines and their handling agents were successfully relocated between terminals in a three month period with a Heathrow team leading the logistics, training and familiarisation programmes.

The airline relocations were delivered with no operational impacts, no reputational damage, and with excellent feedback from the Airline and Operational communities on how the programme was managed.

Figure 12.1: Main Airline Relocations during Q5



8 Regulatory and Legislative Contexts

Capital development at Heathrow, as outlined in this document, takes place within a framework of regulatory and legislative policy. This section provides an overview of the current issues that have an influence on capital investment at Heathrow.

8.1 Aviation and Airport Policy

In March 2013 the Government published its new aviation policy framework (APF), which replaces the 2003 Air Transport White Paper. However the policy framework deferred decisions on airport capacity, including the need for additional runways, to the independent Airports Commission which it set up in 2013. The Commission has been tasked with making recommendations on short to medium term actions to maintain the UK's status as an aviation hub by the end of 2013; and recommendations on long term options by the summer of 2015.

8.2 Current and Future Regulation

Heathrow airport is currently going through a period of transition. The fifth quinquennium is based on the 1986 Airports Act which established a system of economic regulation for those airports with an annual turnover in excess of £1 million (in at least two of the three previous financial years). Under the terms of the Act, such airports must have permission, granted by the Civil Aviation Authority (CAA), in order to levy airport charges. The majority of the Airports Act was repealed in December 2012 and replaced with The Civil Aviation Act 2012. The new Act will set out the framework for how Heathrow is regulated in Q6. A new feature of the regime will be a system of obtaining a licence from the CAA in order to operate as an airport.

8.3 Other Relevant Issues

8.3.1 Town and Country Planning System

Airport Development

All development is regulated by primary legislation set out in the 1990 Town and Country Planning Act, the 2008 Planning Act and the Localism Act 2011. Secondary legislation, such as the General Permitted Development Order (GPDO) 1995, further defines what types of development may not require planning permission.

The GPDO defines what types of development at an airport can be regarded as 'permitted development', i.e. development not requiring planning permission. This covers most forms of airport related development, such as new aircraft hangars, industrial and cargo buildings, multi-storey car parks, office buildings, aircraft stands, piers and satellites etc.

Although 'permitted development' does not require planning permission, there is a requirement to consult with the local planning authority, which means following a similar process as that required for a planning application, albeit that the planning authority cannot refuse approval for the development.

There is also the possibility that any permitted development over 1 hectare in site area, and likely to have significant environmental effects, could also be subject to the Environmental Impact Assessment (EIA) process, in which case permitted development rights would be lost and the normal planning application process then needs to be followed.

Generally, any development at Heathrow involving the extension of a runway or terminal, the provision of a new terminal, or a non-operational building (i.e. not connected to the operation or function of the airport) will require planning permission, with an application needing to be made to the local planning authority.

Any development requiring planning permission, and likely to cause a significant environmental impact, could also be subject to the EIA process, whereby the planning application would need to be accompanied by an Environmental Statement (ES) setting out all the likely significant environmental impacts arising from the development. The requirements for EIA are also set out in secondary legislation, but in respect of Heathrow only usually apply to major projects, such as substantial new stand capacity or new terminal buildings.

However, this can also be relevant where a relatively minor development can lead to a change in the environmental effects. A good example of this is the additional runway access taxiways needed to implement the ending of the Cranford agreement. These facilities allow a different operating pattern to be established at Heathrow which would have significantly different environmental effects, particularly in respect of air noise, ground noise and air quality. Therefore, the development cannot be promoted using permitted development powers and requires an environmental assessment to be undertaken and a planning application for the works made.

Planning Policy

In determining whether development at an airport is acceptable or not, the Planning Act (2004) sets out the hierarchy and format of the development plan process which forms the basis on which decisions are made and controls the amount and type of development at the national, regional and local levels. The 2011 Localism Act amended this process by removing the requirement for regional strategies and by introducing a power for local communities, should they so wish, to require local planning authorities to draw up neighbourhood plans.

At the national level, aviation policy is set by the Department for Transport with airport development guided by the APF published in March 2013.

At the regional level for Heathrow, the London Plan provides the relevant planning policy framework for London and must be in general conformity with national policy. The provisions of the Localism Act, which in general abolishes regional level plans, makes an exception in the case of London because the London Plan has a democratic origin as it is the Mayor of London's blueprint for future development in the capital. At the local level, planning policies for the Heathrow area are contained within the London Borough of Hillingdon Local Plan Part 1 and the Hillingdon Unitary Development Plan, which must also conform to the higher tier regional and national policies.

Local and regional planning policy specific to Heathrow is generally supportive of development which is contained within the limits of growth set down by Government in its decision to permit Terminal 5, and within the defined airport boundary.

The Replacement London Plan was published in July 2011. This document sets out the Mayor's opposition to a third runway at Heathrow, but is supportive of the renewal of infrastructure at the airport which improves efficiency and enhances passenger experience

At the local level, the Hillingdon Local Plan Part 1 Strategic Policies (previously known as the Core Strategy) was adopted by the Council in November 2012. This high level

strategy is supportive of the sustainable operation of the airport within its existing boundaries and the renewal of facilities to improve passenger experience. Also relevant are the more detailed policies which are contained within Hillingdon Unitary Development Plan which cover issues such as design, retaining airport related development within the existing boundary, archaeology and drainage.

In March 2013 Hillingdon Council embarked on the process to produce Part 2 of the Hillingdon Local Plan which will replace the Unitary Development Plan and provide new detailed policies for guiding development proposals, together with a site allocations and proposals plan. Consultation on these proposals will take place at two stages during 2013 and the Heathrow Planning Team will be commenting as required to ensure that the airports interests are safeguarded.

The Planning Act

The Planning Act (2008) provided a new procedure for dealing with Nationally Significant Infrastructure Projects (NSIP's), through the establishment of National Policy Statements (NPS's) and an Infrastructure Planning Commission (IPC). The need for such major infrastructure projects is being addressed in twelve sector based NPS's (e.g. Energy, Waste, Water, Rail & Highways) produced by the relevant Government Department, and providing the strategic planning policy framework for each type of major infrastructure. In the future, any airport developments that result in new buildings or runways that would generate 10mppa or more increase in the capacity of the airport or 10,000 annual cargo air traffic movements would be subject to the new procedure.

The IPC started receiving applications in March 2010 and was an independent decision making authority responsible for examining applications made for a development consent order for a NSIP. However, the 2011 Localism Act has amended this process to the extent that all decisions on major infrastructure projects will now be made by the relevant Secretary of State and the IPC has been abolished and its functions moved into the Planning Inspectorate as part of a new National Infrastructure Directorate

The 2008 Planning Act also introduced the Community Infrastructure Levy (CIL). This is a new charge which local authorities and the Mayor of London are empowered to collect on most forms of development.

From 1 April 2012 any developments for which planning permission is granted will be liable to the CIL charge levied by the Mayor of London and which will contribute towards the cost of Crossrail. The charge will be £35 per m² for net internal floor space of the development. In addition to this, by the end of 2013, it is expected that the London Borough of Hillingdon will have also adopted a CIL charge and this will be added to the Mayor's charge. For most airport buildings the level of the Hillingdon charge will be £35 per m², thus resulting in an overall charge of £70 per m². This new "tax" will add a significant cost to the development process, although there are also opportunities to reduce the liability by deducting areas of floor space being demolished in order to make way for the new development, as it is only the net increase in floor area that is liable for the CIL charge.

9 Trigger Milestones

9.1 Overview

The Q5 triggers are to encourage Heathrow to deliver the agreed Q5 scope to the original schedule captured in the Regulatory Settlement. Rebates are payable to adjust

the payments made to Heathrow through charges in anticipation of capital expenditures, that are subsequently delayed. At the start of Q5 there were 24 triggers. A further 3 triggers have been introduced since the start, the latest of which is for the resurfacing of the Southern Runway. Together these 27 triggers capture over 60% of the value of the Q5 CIP.

9.2 Current Status of Triggers (March 2013)

As at March 2013 the following 13 milestones have been delivered on or before the trigger date and endorsed by the CAA as complete⁴:

1. T1 - Completion of BMI Nose Building Facility
2. T2B- Completion of T2B Phase 1 Stage 1 for Operational Readiness
3. T3 - Completion of Pier 5 refurbishment
4. T3 - Completion of Immigration, Landside Departures & Baggage Hall refurbishment
5. T3 - Completion of Check-in and Security Search refurbishment
6. T4 - New CIP (stand 407) Lounge Access for fit-out
7. T4 - Completion of 3rd jetties on each of 2 A380 stands
8. T4 - Completion of North East bank of Check in desks
9. T2A - Ph1 T2 demolition complete & T2A substructure complete
10. Post T5 Transfer Baggage System - Completion of T5-T3 baggage link
11. T5C - Completion of satellite
12. T5C - Completion of nodes and link bridges to stands 563/564
13. T2A - Phase 1 Building weather-tight

In total 4 milestones have been delivered that have incurred rebates (all totals in 07/08 prices). These have all been endorsed as complete by the CAA and are:

1. Completion of T4-T1 baggage tunnel refurbishment - Rebate incurred £0.2m
2. T4 - Completion of Baggage Sorter (Replacement) - Rebate incurred £0.6m
3. T3 pier 7 Refurbishment Complete - Rebate incurred £0.2m
4. T4 Check-in Phase completion of South West bank of check in desks – Rebate incurred £0.2m

There are eight milestones that are not yet delivered but which are incurring rebates on a monthly basis (but see notes under change control section):

1. Completion of Outer Pier North;
2. Completion of the T3 Integrated Baggage System;
3. Completion of the baggage connectivity transfer tunnel T3-T1;
4. Completion of enhancements to the T5 Track Transit System (TTS);
5. The diversion of the East Church Road associated with the redevelopment of the Eastern Maintenance Base;
6. T2A sufficiently progressed for operational trials to commence;
7. T2B completion of the midfield pier section ready for operational readiness; and
8. Completion of passenger connectivity between T2A and T2B.

Finally, there is one milestone with a trigger date in the future:

1. Restore Southern Runway to Category 3 (due 31st December 2013)

⁴The MSCP Car park project was not overdue in March, as the trigger date was 1st April 2013. At present this trigger date has not been met and therefore Heathrow is paying a rebate.

9.3 Trigger Change Control

The broad principles for change control of triggers are set out in the CAA's decision on Q5 Triggers (February 2009). Via consultation in 2010 - 2012, these principles were turned into a workable process which defined the categories of trigger change and how each was to be dealt with through consultation. This was signed off at a CIP Working Group Trigger workshop on 24th May 2012.

As this process was being developed, its principles were successfully applied to four Q5 trigger projects in 2010 resulting in amended triggers, which have since been ratified by the CAA. In 2011 and 2012 a further comprehensive consultation process was undertaken concerning the following triggers:

- Post T5 Transfer Baggage System (T5 to T3);
- Post T5 Transfer Baggage System (T3 to T1);
- Outer Pier North (or T2C North);
- T2B Phase 2;
- Eastern Maintenance Base enabling works; and
- T5C.

As a result, changes to 3 further triggers were agreed (Post T5 Transfer Baggage System (T5 to T3), Outer Pier North and T5C). These have subsequently been ratified by the CAA.

In 2013 change proposals affecting the following triggers are subject to on-going consultation with airlines:

- Completion of T2B;
- MSCP2;
- Eastern Maintenance Base enabling works.

Appendix L provides the status of all Q5 triggers as at March 2013.

10 Consultation on Capital Development Projects

A comprehensive structure is in place to engage with the airline community on the Q5 Investment Programme. The Planning and Regulations Board (PRB) (formerly known as the Joint Steering Team (JST)) provides a forum for cross campus consultation and is attended by representatives from the home based carriers, the alliances, IATA and the AOC.

The figure below shows the current structure.

Figure 10.1: Development Stakeholder Consultation Chart



10.1 Stakeholder Programme Boards

Key projects are discussed at each of the Stakeholder Programme Boards (SPB). If there is a key project which affects more than one area of the airport, an update will be provided to each relevant SPB, with one SPB taking full ownership of the project. The SPBs meet on a monthly basis and are chaired by Programme Leaders. The SPB provides a forum for individual project consultation including change and progress reporting. Membership includes representatives of airlines, alliances, IATA and the AOC.

10.2 CIP Working Group

In addition to the Stakeholder Programme Boards, Heathrow consults with the airline community on the overall delivery and development of the CIP, through a monthly CIP Working Group (a sub-committee of the PRB). These meetings review the high level progress of Q5 delivery, change, together with monitoring of capital efficiency, Annex G compliance and overreaching financial issues for current and future quinquennia.

10.3 Consultation at Gateways

A selection of Q5 projects were identified as meeting the Annex G definition of 'Key Projects', these were agreed by Heathrow and the airlines. For Key Projects, formal gateway consultation events are held in line with Heathrow's project management process at key gateway stages. For the largest projects, consultation has been undertaken through dedicated working groups. For other 'Key Projects', it has been deemed appropriate to consult through the SPBs.

10.4 Change Control

The Change Control Process is built around the principle of consultation at the earliest stage possible and Heathrow consults the airline community extensively on changes to cost or scope in the CIP. The status of outstanding change issues are reviewed and reported regularly and a pan airport view of significant items are provided to the CIP Working Group which considers cross campus issues.

Heathrow is continuing with the established change control process which was introduced in June 2008 to capture all changes to projects arising from baseline reviews, budget or scope change. This process is called Client Change Control and ensures that all changes are assessed, consulted upon with airlines, and endorsed for implementation.

The CIP Working Group has been used for final consultation on behalf of the PRB. In addition, the CIP Working Group has agreed the categories of client change on which consultation should be conducted, the forum (Stakeholder Programme Boards or CIP Working Group) that should consider each category of change and the airline representatives who have the authority to endorse changes on behalf of the community.

Impacts and status of all change requests are captured on a central Client Change database. This information is shared with airlines each month via Stakeholder Boards and the CIP Working Group. A dashboard report is also produced for the CIP Working Group each month which is designed to illustrate the volume and status of change across the CIP and provide an indication of how successful consultation is being conducted in relation to the implementation of change.

10.5 Project for the Sustainable Development of Heathrow (PSDH)

The management and allocation of PSDH funds continues to be governed through the Planning and Regulations Board (PRB).

Technical Notes

Project Definition Sheets

Project Definition Sheets (PDS's) for each programme are included in the SCBP Appendices A-H. They provide an overview of each individual project with an Estimate at Completion (EAC) of £3 million or greater, and these figures are correct as at March 2013. The PDS's provide the following information, where available:

- Information on Heathrow's and the airline community high level objectives for the project.
- Information on scope, delivery and operational assumptions underpinning the project.
- A section to capture Operational Costs related to the completed investment, e.g. additional security resource.
- A section to capture Revenue Impact related to the completed investment, e.g. incremental additional revenue.
- A section on capital financial information, with Estimate at Completion (Outturn) being shown.
- Key context drawings or images in an annex.

Work Breakdown Structure

The Work Breakdown Structure (WBS) for the Heathrow Programmes is correct as at March 2013. The Capital Expenditure Lines have been broken down into the following categories:

- Capital Projects (including Thames Water);
- IT;
- Rail (incorporating Surface Access and Heathrow Express from 2008/09 – 2011/12);
- Surface Access (from and 2012/13-2013/14); and,
- Projects for the Sustainable Development of Heathrow (PSDH).

All numbers have been rounded up to the nearest whole number.

Appendix K is a 'tracker' which details how the current WBS relates to the original 2008 Settlement and it identifies notable scope changes between CIP 2008 and the SCBP 2013.

The tracker is presented in 2007/08 prices.

Price Base

The Q5 regulatory Settlement in March 2008 was published in 2007/08 prices. The following tables (Figures A to D) provide a comparison of the total Capital Investment Plan (CIP) for Heathrow between the CAA 2008 Settlement (in the 2007/8 price base and projected outturn), and the CIP as at March 2013 (in 2007/8 price base and projected outturn). The Q5 + 1 Capital Investment Plan was approved by the CAA in June 2012, and did not form part of the original Settlement. Figures A and B show the original 5 year Settlement, with a separate column showing the total spend for the Q5 + 1.

A breakdown of all projects for Q5 + 1, as approved in 2012, is provided in Appendix M.

CAA Q5 Decision		<i>Cost base: 07/08 Real</i>					
	Year 1	Year 2	Year 3	Year 4	Year 5	Total	Year 6
Capital Projects	831	1005	840	641	298	3615	
Thames Water	3	4	6	6	7	26	
Rail	28	35	33	29	26	151	
IT	24	23	23	21	20	112	
PSDH	163	80	97	123	177	640	
Q5 + 1							735
Total	1050	1146	999	820	527	4542	5277

All values in £ millions.

Figure A: Total CIP Values - Q5 Decision
(Refer to Table 8.3 in CAA's Determination)

CAA Q5 Decision		<i>Cost base: Projected Outturn</i>					
	Year 1	Year 2	Year 3	Year 4	Year 5	Total	Year 6
Capital Projects	870	1101	962	767	372	4071	
Thames Water	3	4	7	7	8	29	
Rail	30	38	38	35	32	173	
IT	25	26	26	25	25	127	
PSDH	171	87	111	147	221	737	
Q5 + 1							960
Total	1099	1256	1144	981	658	5137	6098

All values in £ millions.

Figure B: Total CIP Values - Q5 Decision
(RPI +2%)

CIP 2013		<i>Cost base: 07/08 Real</i>					
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Capital Projects*	681	690	674	833	1071	1172	5123
Rail	12	14	9	15	11	10	71
IT	11	42	41	29	29	51	202
Surface Access	0	0	0	0	3	3	5
PSDH**	0	19	50	23	5	-3	94
Total	704	766	773	900	1118	1234	5495

All values in £ millions.

* Capital projects include payments related to Thames Water & transfers from PSDH

** Excludes unallocated PSDH budget and budget transferred to Capital Projects

Figure C: Total CIP Values - SCBP 2013

CIP 2013		<i>Cost base: Projected Outturn</i>					
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Capital Projects*	715	725	708	892	1158	1300	5499
Rail	13	14	10	16	12	11	76
IT	11	44	43	31	31	57	217
Surface Access	0	0	0	0	3	3	6
PSDH**	0	20	52	24	6	-3	99
Total	740	804	812	964	1210	1368	5897

All values in £ millions.

* Capital projects include payments related Thames Water & transfers from PSDH

** Excludes unallocated PSDH budget and budget transferred to Capital Projects

Figure D: Total CIP Values - CIP 2013

Figure D shows the total Heathrow Q5 Capital expenditure (outturn prices) of £5,897 million, whereas the CAA's outturn Q5 Capital expenditure shows £6,098 million, in Figure B. The variance of £201 million is a result of unallocated PSDH funds, partially offset by additional Capital Expenditure (including Winter Resilience). Heathrow has agreed with the airline community that it will work to ensure that the overall Heathrow Q5 Capital expenditure (outturn prices) will not exceed the CAA's outturn Q5 Capital expenditure forecast.

Projects for the Sustainable Development of Heathrow (PSDH)

The Q5 regulatory settlement allowed for £640m (2007/08 prices) of capital investment for PSDH.

Heathrow and the airline community agreed that the £640m (inflated to £672m at 2008/09 prices in CIP 2009) should be split between different categories of expenditure. These were:

- £440m for third runway and master-planning activity.
- £62m for runway resilience work, including the ending of the Cranford Agreement.
- £170m for other capacity increasing projects.

This split being broadly equivalent to the manner in which the possible sums for PSDH were outlined by Heathrow in the period leading up to the Q5 settlement and forming the basis of the £640m.

This split was agreed by the airline community in June 2009 and formally recorded, with the full project control and ex post arrangements, in November 2009.

In May 2010, the UK Government withdrew support for a third runway; this has resulted in the remaining third runway expenditure becoming unallocated. These funds can only be allocated to new capacity and resilience based projects/ scope with prior approval from CIPWG, JST and CAA. During 2011/12 £47m was transferred from PSDH into the T3IB project.

Appendix A: Terminal 2 Programme

9351	T1 Baggage Prolongation Programme
10309	T2 Phase 1 Baggage (T1 Transitions)
8802	T2A Building and Stands
4201	T2B Phase 2
7209	T2B Apron
9805	T2 ICS
3814	MSCP 2
9723	T2 Ancillary Accommodation

Header Information

BCT No.	9351
Op No.	24932
Project Name:	T1 Baggage Prolongation Programme

Project Overview, Objectives and Status

Overview:	
Description:	This project aims to prolong the life of the Terminal 1 baggage system and also enable the T2 Phase 1 Baggage project to deliver the key T2A Phase 1 direct and transfer baggage requirements within Terminal 1 to allow Terminal 1 to support T2A Phase 1 until such time as T2A Phase 2 is completed.
Ref. Drawings / Images: <i>(Refer to Annex A)</i>	None provided due to scale of project.
Objectives:	
HAL:	Replace Standard 1 baggage screening machines with Standard 2 to maintain regulatory compliance and integrate US carrier screening into the direct baggage system. To prolong the life of the Terminal 1 Baggage system by updating Information Technology systems so that they remain supportable and resilient. To reduce down time through improving the speed of fault identification and rectification. Facilitate connection of the T2A Departures Baggage System into the existing Terminal 1 system.
Airline:	As per HAL.

Project Benefits:

Regulatory Compliance.
ASQ and QSM baggage performance to be maintained.

Status:

Programme:	Project Gateway Stage:
Eastern Campus	Implement

Airline Engagement:

Formal Gateway reviews have been held with the airline community at the key stages of the development process as follows:

Option Decision	17 March 2010
Construction Decision	27 September 2010
Targets Confirmation	15 March 2012

In between the formal Gateway Reviews on going weekly / monthly consultation occurs at the following forums: The Baggage Stakeholder Strategy Board, The Eastern Campus Stakeholder Board, The Terminal 1 Operations Working Group

and The Eastern Campus Baggage Working Group.

Project Delivery

Current Control Budget:			
Total Capital Budget <i>(Estimated At Completion)</i> :		Q5 £66,039,858	Q5+1 £3,665,621
		Q6 £0	Total £69,705,479
<i>Refer to Annex B for cost information detail.</i>			
Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
11/2009 & 01/2010	04/2010	04/2013	On-going
<i>Refer to Annex C for programme information detail.</i>			
Assumptions:			
The following points cover the significant delivery assumptions related to this project;			
Project completion must align with T2A testing.			
Only 1 Direct and 1 Transfer HBS line to be impacted at any one time.			
The baggage systems operation will need to be maintained throughout and disruption minimised.			
Passenger experience is to be maintained at an acceptable level.			
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>			

Operational Issues

HAL Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
HBS Machines (opex)	-£406,000	HBS Standard 2 support
Assumptions:		
The following points cover the significant operational assumptions related to this project;		
HBS Spare parts will not be free-issued.		
Additional L3 resource required to support the more technically complex standard 2 machines.		
L3 Resource will be utilised across the Heathrow Campus in T3 and T4 once machines are installed.		
The cost for this resource will not increase proportionately to the number of new machines because HAL is able to take advantage of economy of scale by stretching this resource across all Baggage areas at Heathrow.		

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
HBS Conveyor Systems	-£40,000	New conveyor systems for Standard 2 HBS machines
SCADA	-£60,000	SCADA Technical Support
Assumptions:		
The following points cover the significant operational assumptions related to this project;		
There is no change in the HAL facilities charges. Operating costs relate to the HAL baggage operation only, other airline impacts outside of the HAL impact have not been fully defined at this point.		

Average Asset life:	
Average Asset Life:	See below
Commentary:	
This project is comprised of different elements with differing asset lives as follows:	
IT	7 years
M&E	15 years
<i>Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.</i>	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	6.9p
Commentary:	
None.	
<i>Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only.</i>	

Non Construction Risk
The following points cover any significant areas of risk for the Airline Community regarding this project.
Embargo periods resulting from the London 2012 Olympics shorten the available delivery period.
Further changes in legislation.

Annex B: Project Delivery: Cost Information:

Project Information

Project Name: T1 Baggage Prolongation Programme
BCT No.: 9351

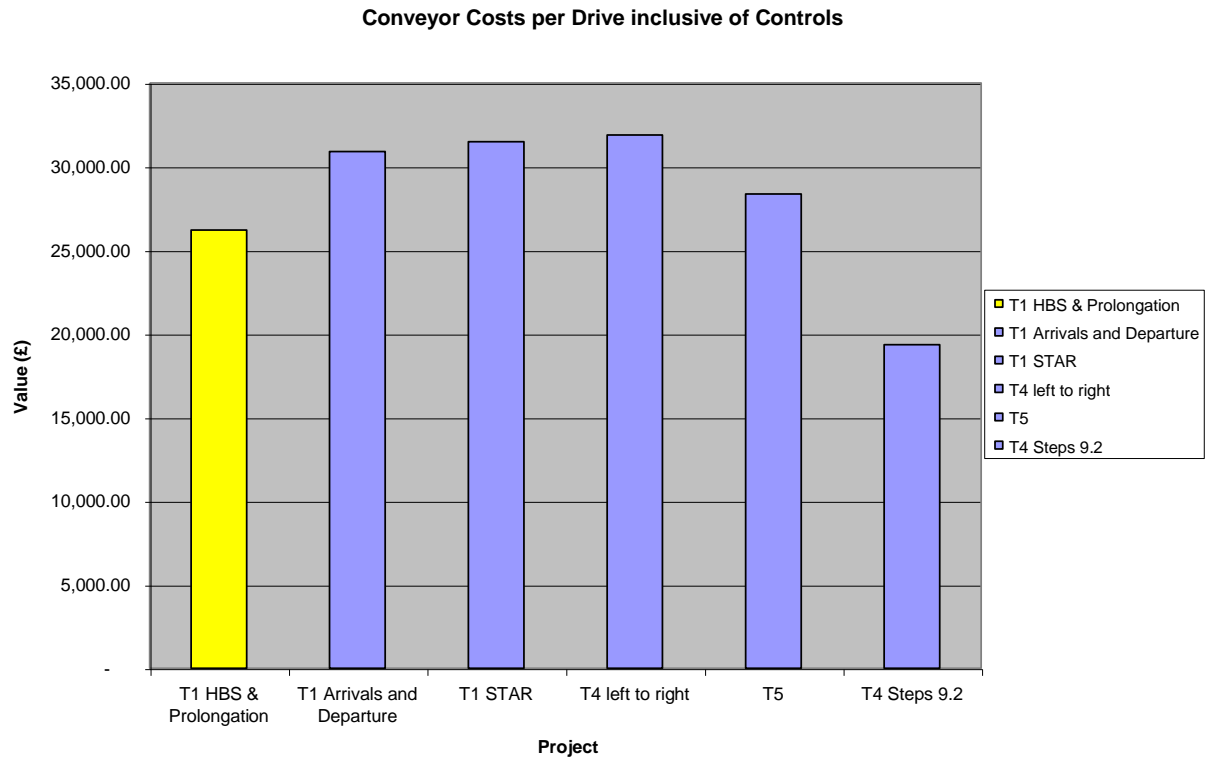
Cost Information

All information extracted from March 2013 month end process

Base Costs:	£47,424,973	68	%
On-Cost:	£22,231,473	31.9	%
Inflation	£0	0	%
Opportunity	-£355,829	-0.5	%
Risk	£404,864	0.6	%
Total	£69,705,481	100	%

Cost Benchmark Comparisons:	
Project Name:	T1 Baggage Prolongation Programme
Total Capital Budget (<i>Constant Prices</i>):	£69,705,481
Guidance Notes:	
<p>The fragmented scope of the T1 Prolongation project does not easily lend itself to extensive external benchmarking as a means to demonstrate value for money. With this in mind the project team have worked closely with the suppliers selected through the procurement process to deliver a robust set of bottom up tender pricing from their respective supply chains as a means to demonstrate value for money.</p> <p>In summary 59% of the total cost plan was based on tender pricing, equating to 80% of the Base Costs (the remaining 20% being the L3 machines procured by an existing HAL call off arrangement and the HAL IT costs, both of which are bottom up costs. Procuring the HBS machines directly has avoided OHP mark-up).</p>	
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>	

Benchmarking of conveyor costs per drive



Explanation

The graph shows the conveyor costs per drive for the T1 Baggage HBS project benchmarks favourably against other Heathrow projects and is £3m of the total cost plan. This element does not include the HBS machines.

Header Information

BCT No.	10309
Op No.	25646
Project Name:	T2 Phase 1 Baggage

Project Overview, Objectives and Status

Overview:	
Description:	The outbound and transfer baggage systems serving Terminal T2A Phase 1 will be processed by the existing Terminal 1 baggage system. This project delivers the necessary additional capacity and system alterations to enable the exiting Terminal 1 baggage system to accommodate the incremental demand created by the T2A Phase 1 project.
Ref. Drawings / Images: <i>(Refer to Annex A)</i>	General Arrangement of T2 Phase 1 Baggage
Objectives:	
HAL:	To provide the necessary additional capacity within the Terminal 1 baggage system. Improve health and safety through the installation of manual handling aids where possible. Ensure solution sustainability during the future development of Eastern Campus. Ensure the required performance metrics are met.
Airline:	As per HAL. Increase airline alliance co-location by delivering T2A Phase 1 baggage solution in Terminal 1 for opening day.

Project Benefits:

Provide additional capacity within the T1 baggage system to enable the opening of T2A Phase 1.
ASQ and QSM baggage performance to be maintained by providing sufficient capacity for T2A Phase 1 bags in the T1 baggage system.

Status:

Programme:	Project Gateway Stage:
Terminal 2	Construction Decision

Airline Engagement:

A number of design reviews leading to a final Construction Decision Gateway have been held with the airline community on this project. Dates and detail are as follows:

Option Decision T1/STAR MOU	21 Jun 2010
Option Decision T1/STAR MOU (T1-T4 Tunnel Closed)	22 Oct 2010
Option Decision T1/STAR MOU (T1-T4 Tunnel Open)	04 Mar 2011
Construction Decision Gateway T1/STAR MOU	30 Sep 2011

Construction Decision	15 Mar 2012
In between the formal Gateway Reviews on going weekly/monthly consultation occurs at the following forums: The Baggage Stakeholder Strategy Board, The Terminal 2 Stakeholder Board, The Terminal 1 Operations Working Group and The Eastern Campus Baggage Working Group.	

Project Delivery

Current Control Budget as March 2013 Month end:			
Total Capital Budget <i>(At Completion)</i> :		Q5	£55,523,154
		Q5+1	£54,639,355
		Q6	£89,660
		Total	£110,252,169
<i>Refer to Annex B for cost information detail.</i>			
Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
Completed as part of 8802 T2A & Associated Projects	02 / 2012	02 / 2014	Q2 2014
<i>Refer to Annex C for programme information detail.</i>			
Assumptions:			
The following points cover the significant delivery assumptions related to this project;			
Key delivery assumptions for this project are:			
Terminal 1 Passenger experience to be maintained at an acceptable level. A T4 EBS required by August 2013 either manual or automated.			
Key scope assumptions for this project are:			
Design occupancy is based on Star MOU (with CO), T1 Star non-MOU and T1 non-aligned (A3, AC, BD, CA, CY, EI, FI, JJ, LH, LO, LV, LY NH, NZ, OS, OU, OZ, SA, SK, SN, SQ, TG, TK, TP, UA, UN, US,CO)			
Post-Occupancy Decision Dec 2012 the airline occupancy is defined as:			
T2A : UA, AC, NH, CA, SK, TG, TK, BR, EI, OZ, A3, SQ, MS, ET, LH, OS, LX, SN, NZ, SA, TP, OU, LO, US, VS, 4U			
T1 : BA, LY, JJ, UN, CY, FI			
Standard 3 HBS replacement excluded from scope.			
Provision of T4 Transfer Early Bags Store (TEBS), for T4 transfer bags.			
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>			

Operational Issues

HAL Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Hold Baggage Screening	-£6.5k	Additional Standard 2 HBS machine provided for Reflight.
Assumptions:		
The following points cover the significant operational assumptions related to this		

project;
 L3 Resource for maintenance has been included for under the additional resource required for 9351: T1 Baggage Prolongation Project.
 The majority of the HBS impact is shown as part of 9351 T1 Baggage Prolongation.

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Baggage Operation & Maintenance	-£771,140	Terminal 1
Baggage Operation & Maintenance	-£927,440	Terminal 4
Facilities Charges	-£259,820	Terminal 1
Facilities Charges	-£312,070	Terminal 4

Assumptions:
 The following points cover the significant operational assumptions related to this project;
 These figures are based on the Scheme Design. Further refinement to the estimated Opex will be carried out following production design.
 These are incremental numbers and only relate to the HAL baggage operation; other airline impacts outside of the HAL impact have not been fully defined at this point.

Average Asset life:
 Average Asset Life: See below

Commentary:
 This project is comprised of different elements with differing asset lives as follows:
 IT 7 years
 M&E 15 years

Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.

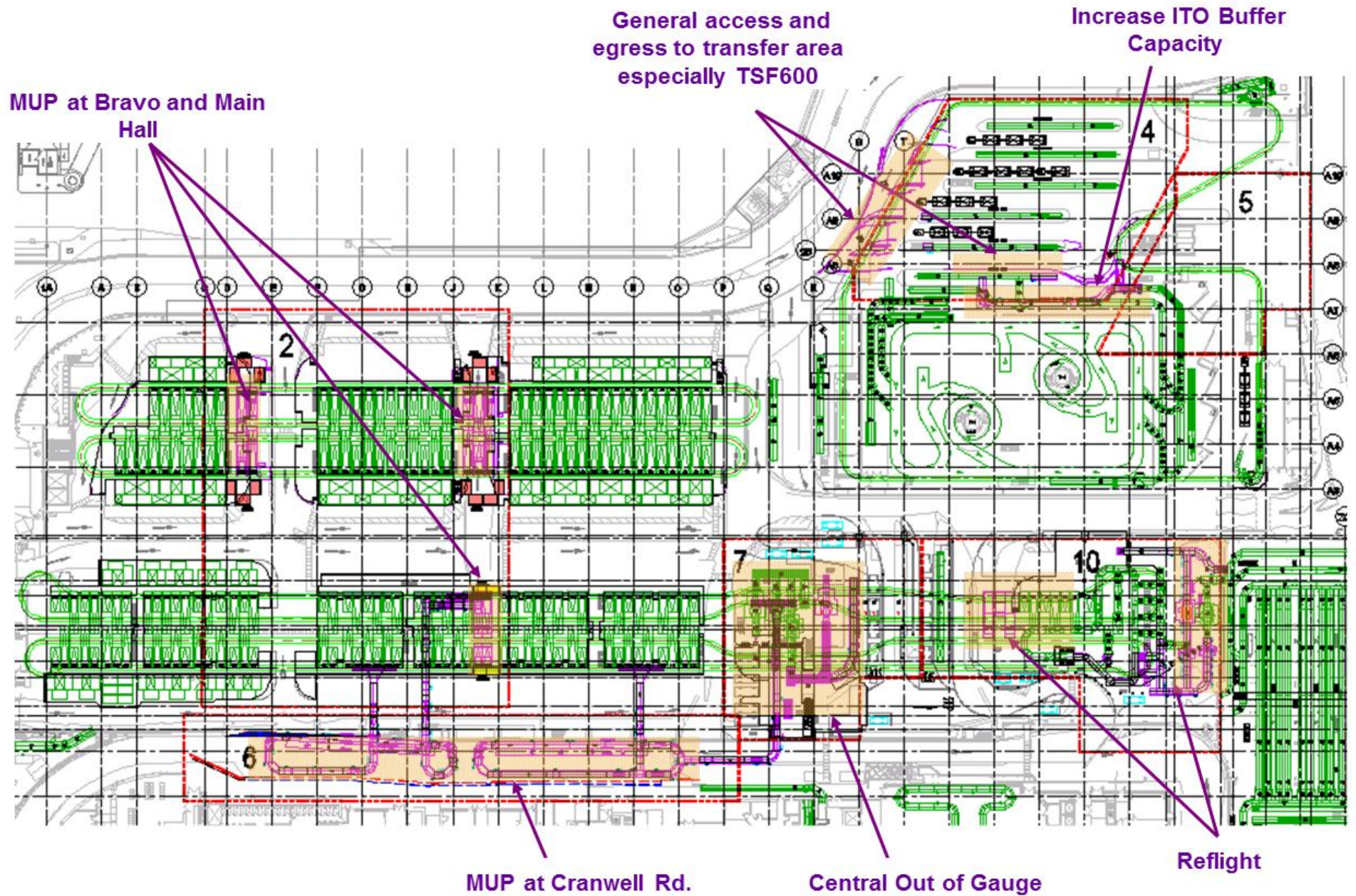
Impact on User Charges:
 Estimated Per Passenger Cost Impact: 10.9p

Commentary:
 None.

Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only.

Non Construction Risk:
 The following points cover any significant areas of risk for the Airline Community regarding this project.
 Further changes in legislation.
 Changes in occupancy particularly Terminal 1 may impact scope causing an increase in cost and schedule resulting in a possible delay to the project completion.

Annex A: Overview:



Annex B: Project Delivery: Cost Information:

Project Information

Project Name: T2 Phase 1 Baggage
BCT No.: 10309

Cost Information

All information extracted from March 2013 month end process

Base Costs:	91,160,063	82.7	%
On-Cost:	14,973,152	13.6	%
Inflation & Incentivisation	1,558,712	1.4	%
Opportunity Risk	-2,314,244	-2.1	%
	<u>4,874,486</u>	4.4	%
Total	110,252,169	100	%

Commentary:

Cost Benchmark Comparisons:	
Project Name:	T2 Phase 1 Baggage
<u>Total Capital Budget (Constant Prices):</u>	110,252,169

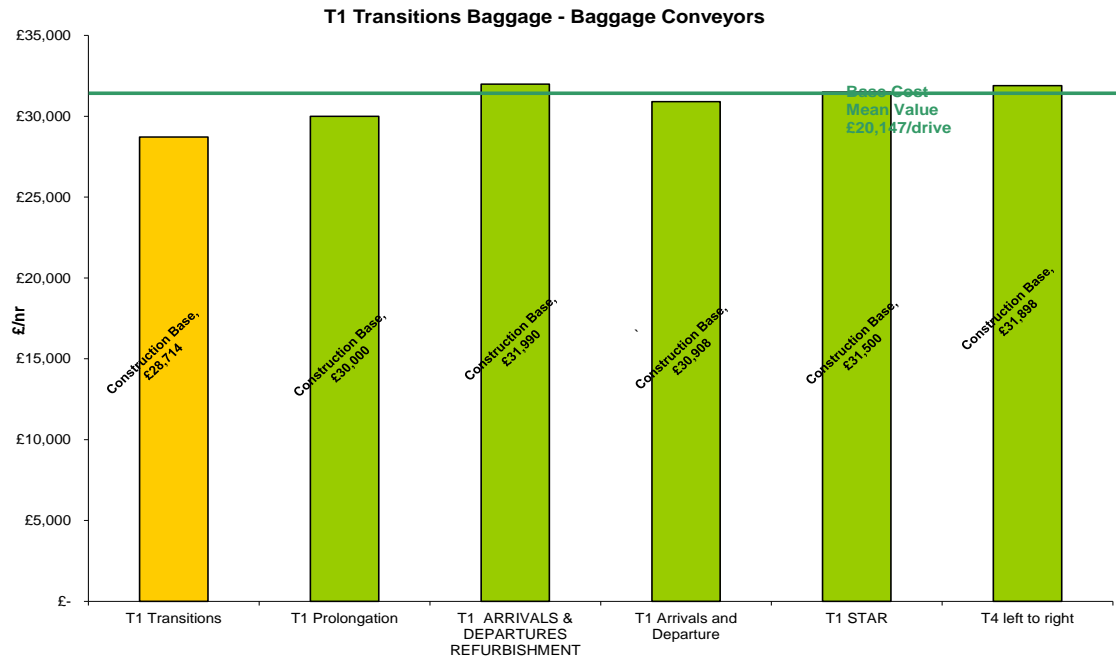
Guidance Notes:

Benchmark data provided from T2 Phase 1 Baggage Interim Funding Paper October 2011.

The project carried out initial benchmarking. Two approaches have been used so far to demonstrate value for money;

- Benchmarking of key baggage elements
- Market Tendering (OJEU selected Contractors)

Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.



The above graph shows the Baggage Conveyors cost per drive for T2 Phase 1 Baggage when compared with other similar projects.

Header Information

BCT No.	Various
Op No.	24000, 23994, 24013, 24006, 23225, 23993, 23223
Project Name:	T2A & Associated Projects

Project Overview, Objectives and Status

Overview:	
Description:	<p>Terminal 2A replaces the out-dated facilities in the existing Terminal 2 and the forecourt with facilities primarily for the STAR Alliance group of airlines to enable the consolidation of their operation into one building at Heathrow providing competitive equivalence and to meet the future needs of STAR Alliance passengers and Heathrow Airport Limited's requirements for a future proof capacity.</p> <p>The works also include the amendments to the facility as a result of the changes in occupancy (as a consequence of the sale of BMI to IAG) and also security compliance.</p> <p>The BCT numbers captured within this Project Definition Sheet are as follows:</p> <p>6100 T2A Early Stage Cost 8828 Eastern Campus EIS 7767 T2A Scheme Design Stage 8802 T2A Building including baggage scope within T2A & Stands 8799 QB & T2 Demolition 8807 T2A Phase 1 Stands (Design only) 8794 Eastern Campus Leadership Team 8798 Eastern Campus Logistics 9022 Automation Prove Out</p>
Ref. Drawings / Images:	Refer to Annex A
Objectives:	
HAL:	<p>Co-location of the STAR Alliance airlines</p> <p>Improve passenger experience (QSM: 4.1)</p> <p>Reduce operational expenditure both airline and airport</p> <p>Improve operational efficiency</p>
Airline:	<p>Star Alliance move under one roof</p> <p>Greater Star Alliance connectivity</p> <p>Above will improve Alliance working together, and ease of transfers / connectivity for passengers using Star member airlines.</p>

Project Benefits:

Improve QSM and ASQ scores
Improve hub connections for STAR Alliance
Airport income increase
Operational expenditure reduction both airline and airport
40% decrease in CO2 emissions and achievement of "very good" BREEAM rating.

Status:	
Programme:	Project Gateway Stage:
Eastern Campus	Construction Decision

Airline Engagement:	
Details of airline engagement / consultation to date:	
Key Gateways:	
Basis of Design (Sprint 33)	7 th April 2008
Shell & Core and GA's	25 th June 2008
Pre-Construction Decision endorsement of scheme	10 th June 2009
Project update overview and final design	14 th May 2010
Stakeholder Event (with updated GA's)	28 th June 2011
On-going consultation:	
Eastern Campus Stakeholder Programme Board – monthly	
Eastern Campus Airline Baggage Working Group – Weekly or as required	
CIP Working Group (as necessary) – monthly	
Joint Steering Team (JST) - quarterly	
STAR / HAL Integrated Programme Board – monthly	
STAR Operational Readiness Team meetings – fortnightly	
Ad-hoc working groups	
STAR Airline Champions workshops – quarterly	

Project Delivery

Current Control Budget:			
Total Capital Budget (<i>Estimated At Completion</i>):	Q4	£35,432,774	
	Q5	£965,731,601	
	Q5+1	£426,742,266	
	Q6	£40,341,962 (under consultation)	
	Total	£1,468,248,603	
<i>Refer to Annex B for cost information detail.</i>			
Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
07/2007 (Options)	07/2009	11/2013	Q2 / 2014
Assumptions:			
The following points cover the significant delivery assumptions related to this project:			
This project excludes all work associated with the T2A forecourt and links to the new MSCP Phase1 and also excludes any baggage capacity works required in Terminal 1 to support the operation of T2A Phase 1. This project includes the main building, the Vertical People Movement building and the section of the passenger tunnel to T2B under the T2A stands; the baggage system within T2A and the baggage link to Terminal 1; the stands around T2A Phase 1, together with the associated services, fixed links, nodes and passenger boarding bridges together with the cooling station.			
The full scope of the Logistics and Leadership projects cover the whole of the Terminal 2 Programme and not just the T2A Project referred to in this PDS.			
It is assumed that there are no additional restrictions above what is currently known associated with airside operations or National Air Traffic Services operations at Heathrow.			
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>			

Operational Issues

HAL Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Retail	£60.0m	
Property	£9.4m	
Other	£1.8m	
Cleaning	-£7.9m	
Maintenance	-£6.9m	
Staffing	-£39.5m	
Rates	-£13.6m	
Utilities	-£4.6m	
Other	-£1.5m	
Hold Baggage Screening Out Of Gauge	-£248k	
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
Revenue and operating costs are total (not incremental) estimates IT/ICS operating costs not included Income and costs include T2A Phase 1 stands and baggage		

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Baggage Operation & Maintenance	-£6.78m	
Out Of Gauge Van Service	-£1.18m	
Facilities Charges	-£3.711m	
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
Operating costs relate to the T2A HAL baggage operation only. T1 elements are covered in projects 24932 and 25646. Other airline impacts outside of the HAL impact have not been fully defined at this point.		

Average Asset life:	
Average Asset Life:	See Below
Commentary:	
The development comprises of different elements with differing asset life as follows:	
Structures	50 years
M&E	20 – 30 years
Fit out	5 – 15 years
<i>Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.</i>	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	N/A
Commentary:	
None	
<i>Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore</i>	

information is indicative only.

Non Construction Risk:

The following points cover any significant areas of risk for the Airline Community regarding this project:

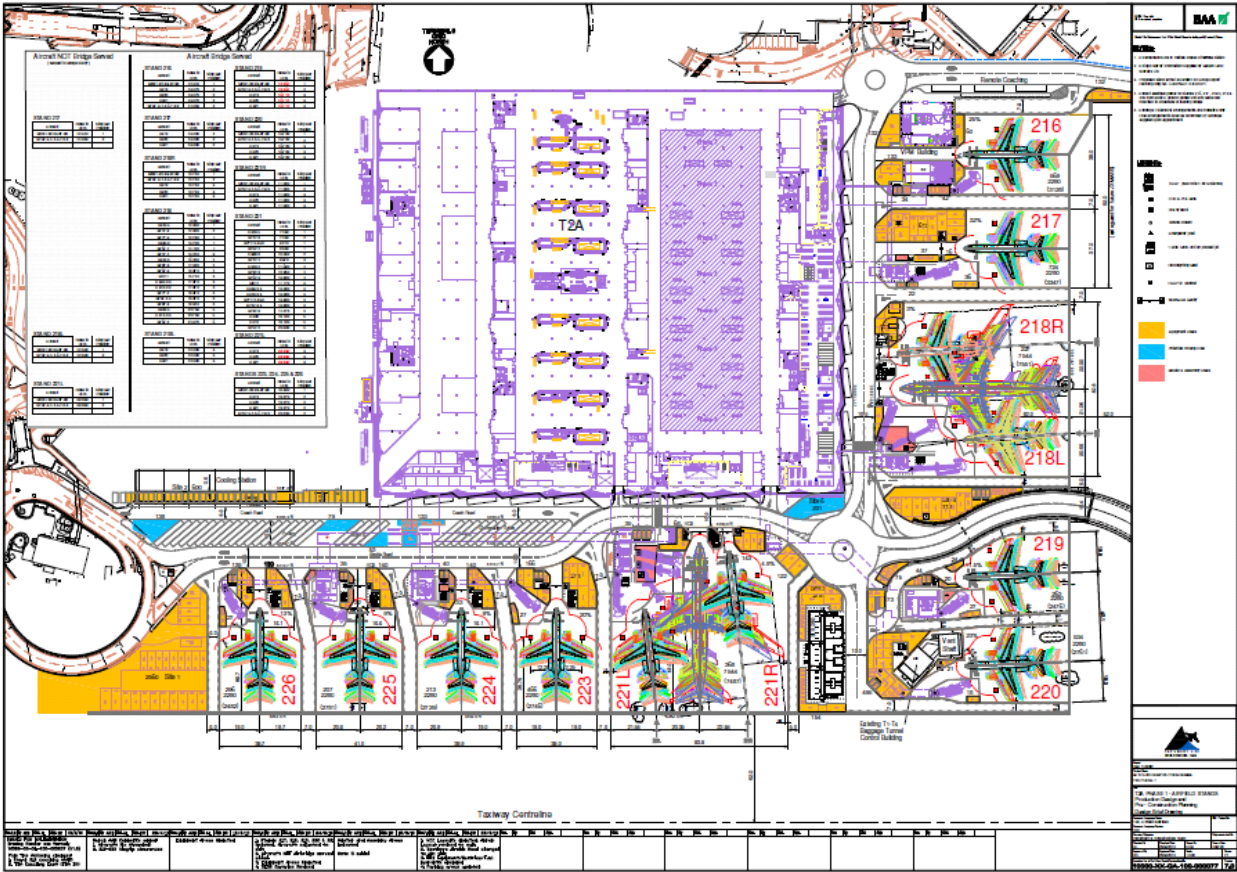
Any systems integration and testing causing disruption across the Heathrow network which will be managed by HAL IT.

Impact on Central Terminal Area traffic flows as a result of construction activities during latter fit out stages.

Impact on airside traffic flows as a result of construction activities.

Overall delay to project completion and therefore an impact on future occupancy changes. The critical path for the project is being managed on a regular basis and routes of escalation are in place to address any major concerns.

Annex A: Overview: T2A Phase 1 Image:



Annex B: Project Delivery: Cost Information:

Project Information

Project Name: T2A & Associated Projects
BCT No.: Various as per overview description

Cost Information

All information extracted from March 2013 month end process

Base Costs:	1,250,754,907	85	%
On-Cost:	186,720,973	13	%
Inflation	3,609,888	0	%
Opportunity	- 3,776,187	0	%
Risk	30,939,022	2	%
Total	£1,468,248,603	100	

Commentary:

The On Cost is calculated as a % of total cost. The scope and cost of the Eastern Campus Logistics and Leadership project in this sheet covers the whole of the Eastern Campus and not just the T2A Sub Programme within this project definition sheet.

Cost Benchmark Comparisons:

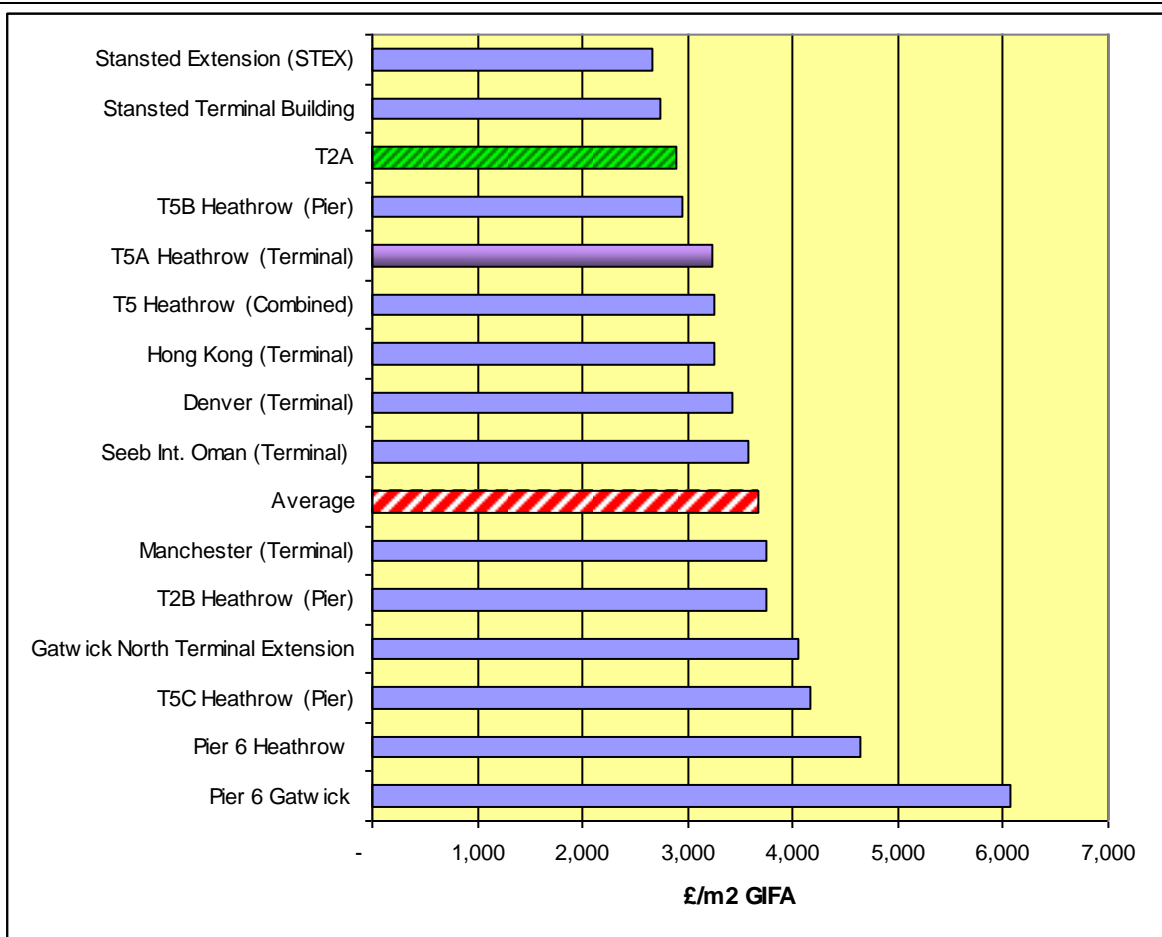
Project Name:	T2A Building & Associated Projects
Total Capital Budget (<i>Nominal Prices</i>):	£1,473,312,631

Guidance Notes:

The Demonstrating Value Report (issued at the time of construction decision in December 2009) demonstrates that the T2A Building (Phase 1) project represents good value for money when benchmarked against comparable schemes. This takes into consideration both current market conditions and constraints (design and operational) placed upon the project. Against the most recent comparator T5A, T2A Building (Phase 1) is 10% less.

Demonstration of value has been achieved through benchmarking against other HAL projects, non-HAL aviation projects and external commercial schemes. Review has been undertaken at a Facility, Elemental and Component level to demonstrate value at an increasing level of detail.

At a Facility Level, the T2A Terminal Building at £2,894/m², benchmarks well below the average of £3,679/m².



Major elements of the project – substructures, structural steelwork, roof and façade – have been externally tendered and have realised savings against the benchmarked cost plan. The project team also carried out market testing for significant elements of the M&E and fit-out packages.

Overall 74% of the HETCo target cost plan has been tendered or market tested which gives added confidence to the EAC.

In addition to the high level facility review the building costs have been analysed at elemental and component level. These analyses utilise the same group of HAL projects used at facility level plus further non-HAL and commercial projects. These again demonstrate that the T2A project delivers value for money.

Benchmarking at this level disguises the impact of building geometry and other factors which need to be considered such as wall to floor ratios and building scale. This analysis reveals that when these factors are considered the T2A Building continues to reflect good value for money.

Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.

Header Information

BCT No.	T2B Phase 2: 4201, T2B Apron: 7209
Op No.	T2B Phase 2: 23463, T2B Apron: 24352
Project Name:	T2B Phase 2 & T2B Apron

Project Overview, Objectives and Status

Overview:	
Description:	<p>The T2B sub programme comprises of 2 projects: T2B Phase 2 and the T2B Apron.</p> <p>T2B Phase 2 completes T2B, providing pier service to an additional 10 stands and interim passenger connectivity from T2A. It also provides safeguarding of permanent passenger connectivity and baggage processing out to a future T2C Pier.</p> <p>T2B Apron provides 12 stands (8 pier served and 4 remote) and taxi lanes to serve T2B Phase 2. T2B Apron also includes ancillary facilities to support ramp operations e.g. equipment parking.</p>
Ref. Drawings / Images: <i>(Refer to Annex A)</i>	Artist's impression showing split phases.
Objectives:	
HAL:	<p>Operational efficiency through "toast racking".</p> <p>Service improvement.</p> <p>Alliance co-location.</p> <p>Increase pier served stand supply and improve airfield operations.</p>
Airline:	As per HAL.

Project Benefits:

Increased airfield operational efficiency through the creation of the "toast rack".
 Provide a mix of pier served and remote stands which safeguard the long term airfield capability of 90mppa.
 Improved transfer product through the co-location of the STAR Alliance airlines.
 Replacement of old assets providing improved passenger experience.

Status:

Programme:	Project Gateway Stage:
Terminal 2 Replacement	Construction Decision

Airline Engagement:

T2B Phase 2
 Formal Gateway reviews have been held with the airline community at the key stages of the development process as follows:

Option Decision	3rd December 2008
Construction Decision, Shell & Core	9th December 2009

In between the formal Gateway Reviews on going consultation occurs as and when required, with the primary forum being the STAR PET meetings which are held bi-weekly.

T2B Apron

Regulatory stakeholders were consulted on the designs for both T2B Apron and T2B at a joint presentation on 09th March 2011. This project was presented to the Infrastructure Programme Stakeholder Board as a Gateway Review for Construction Decision on 08th September 2011.

Project Delivery

Current Control Budget:

Total Capital Budget (Estimated At Completion):	T2B Phase 2	T2B Apron
Q4:	£314,187	Q4: £0
Q5:	£476,376,424	Q5: £27,615,330
Q5+1:	£106,381,283	Q5+1: £33,027,927
Q6:	£17,685,653	Q6: £0
Total:	£600,757,547	Total: £60,643,257

Refer to Annex B for cost information detail.

Schedule:

Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
T2B Phase 2 02/2008	10/2010	11/2013	Q2/2014
T2B Apron 03/2009	04/2012	12/2013	Q2/2014

Refer to Annex C for programme information detail.

Assumptions:

The following points cover the significant delivery assumptions related to this project;

T2B is a core element of the Terminal 2 Replacement in meeting the following strategies:

Terminal 2 Masterplan – fits with the “toastrack” vision.

Passenger Connectivity – provides safeguarding for a TTS system to be installed for T2A Phase 2 opening providing T5 equivalence.

Baggage Strategy – provides safeguarding for an intra-pier baggage system to be installed at a future date (Masterplan 6).

Key enablers for project delivery are:

Central services provision through Terminal 2 and Infrastructure projects.

Delivery of T2A.

Key scope assumptions for this project are:

(Q5 and Q5 + 1) scope

Pier

Provision of pier service for 10 stands.

Segregated pier completed with open gateroom format.

Local flight connections centre.

Retail provision of approximately 1,275m².

Total CIP provision of 3,600m2 in 3 lounges.
 Approximately 1,800m2 of ramp accommodation.
 Basement structure for Baggage Masterplan 6 facility. Baggage fit out excluded.
 Conversion of T2B Phase 1 (North) from closed gaterooms to open gate lounge excluding Gate 232 which will occur in Q6.

Connectivity

Vertical passenger circulation within T2B for underground connectivity.
 T2A-T2B passenger tunnel with segregated corridors between T2A and T2B.
 Safeguarded space for TTS station under T2B and running tunnels to a future T2C across the Lima taxiway.

Safeguarded baggage tunnel to a future T2C across the Lima taxiway.

Stands and taxi lanes

Fully serviced contact stands 236 (MARSed), 238, 239, 241, 242,243 (MARSed), 244 & 246 (MARSed).

Fully serviced remote stands 251, 252, 253 (MARSed), 254 (MARSed).

Kilo and Lima taxi lanes adjacent to above stands.

Storm and foul water drainage.

Q6 Scope

Conversion of T2B Phase 1 (North) Gate 232 from closed gateroom to open gate lounge.

Demolition of temporary connector and temporary energy centre and completion of VCC 234.

Scope Exclusions are:

Fit out of baggage systems

Fit out of TTS

Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.

Operational Issues

HAL Financial Revenue and Operational Cost (Opex) Impact:			
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum: T2B Phase 2	Revenue (+) / Cost (-) Impact per Annum: T2B Apron	Commentary:
Aeronautical			
Retail	1,250		
Property Income	1,908		
Cleaning	(2,450)		
Maintenance	(626)	(150)	
Staffing	(1,487)		
Rates	(3,386)	(250)	
Utilities	(1,400)		
Assumptions:			
		The following points cover the significant operational assumptions related to this project;	

Airline Financial Revenue and Operational Cost (Opex) Impact:

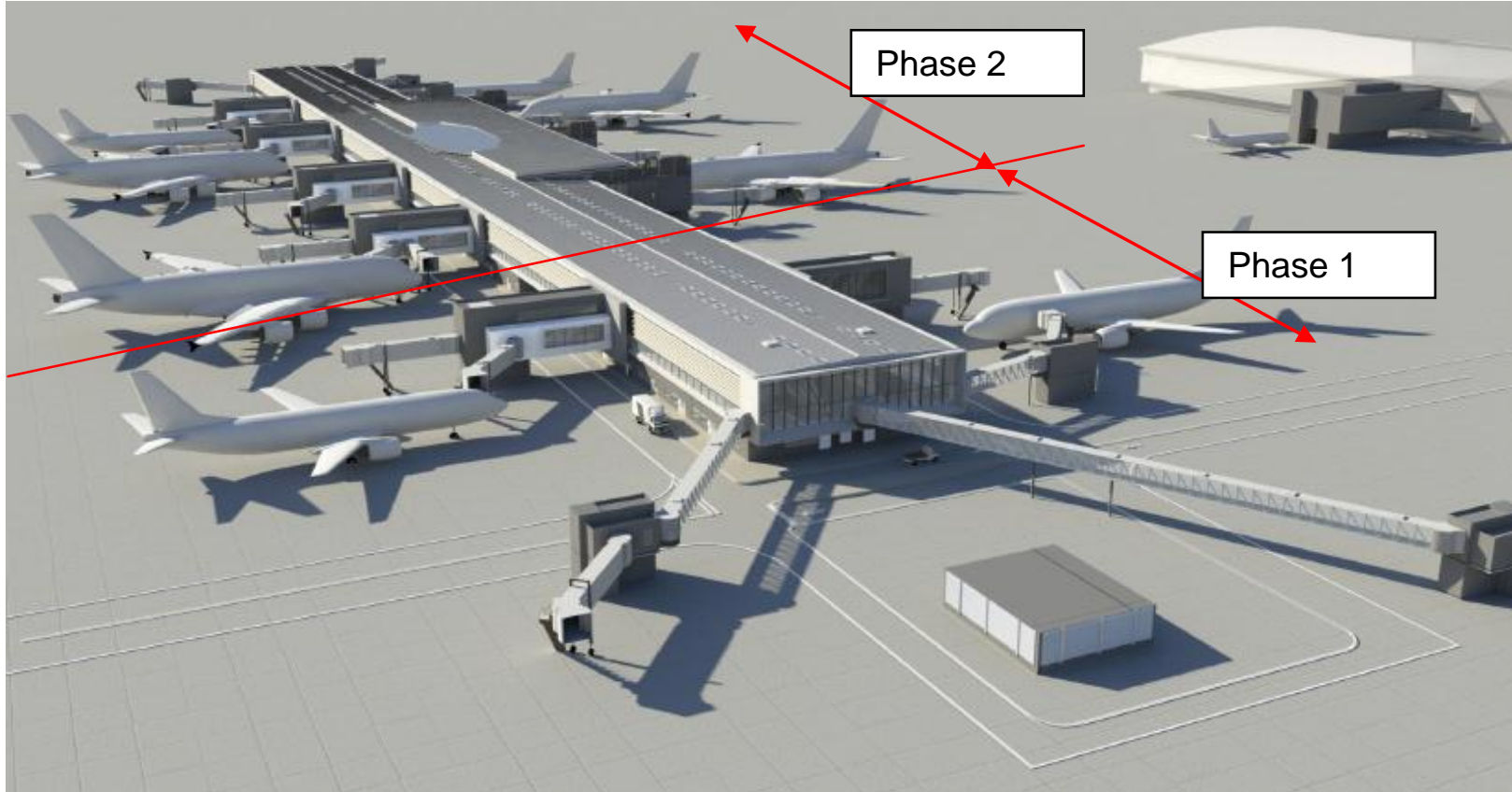
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
		Not Defined
Assumptions:		
The following points cover the significant operational assumptions related to this project;		
None		

Average Asset life:	
Average Asset Life:	See below
Commentary:	
The development comprises of different elements with differing asset life as follows:	
Structures	50 years
M&E	20 – 30 years
Fit out	5 – 15 years
Stands & taxi lanes	30 years
<i>Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.</i>	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	N/A
Commentary:	
None.	
<i>Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only.</i>	

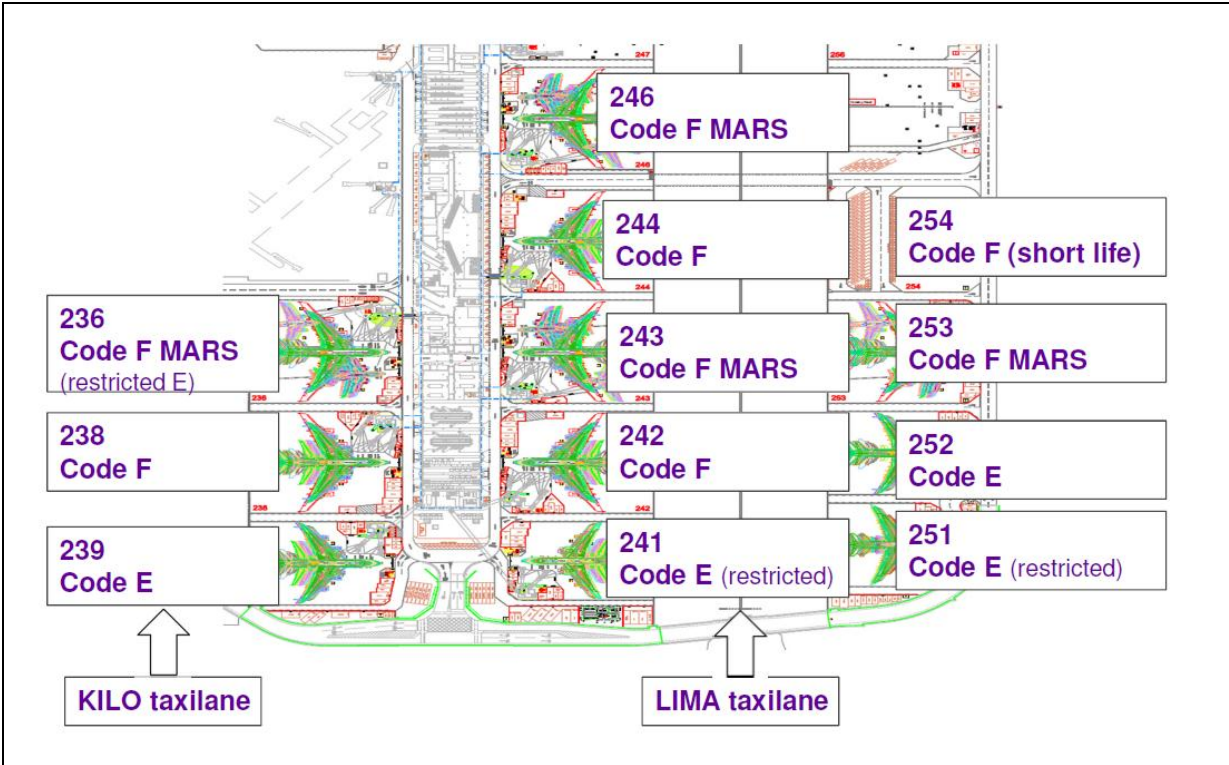
Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project.
In order to complete stand 246 and the Lima taxi lane tie in stands 247 and 255 will need to be closed. It is currently assumed that the Remote Stands (251, 252 and 253) will be delivered first so that they can be replacements.

Annex A:

T2B Phase 2 Overview: Reference Drawing / Image:



Eastern Campus Apron Overview: Eastern campus Apron



Annex B: Project Delivery: Cost Information:

Project Information

Project Name: T2B Phase 2
BCT No.: 4201

Cost Information

All information extracted from March 2013 month end process

Base Costs:	£550,077,174	91.6	%
On-Cost:	£ 46,002,183	7.7	%
Inflation	£1,399,736	0.2	%
Opportunity	-£ 7,290,984	-1.2	%
Risk	£ 10,569,438	1.8	%
Total	£ 600,443,360	100	%

Project Information

Project Name: T2B Apron
BCT No.: 7209

Cost Information

All information extracted from March 2013 month end process

Base Costs:	£55,025,823	90.7	%
On-Cost:	£4,358,898	7.2	%
Inflation	£0	0.0	%
Opportunity	-£795,619	-1.3	%
Risk	£2,054,155	3.4	%
Total	£60,643,257	100	%

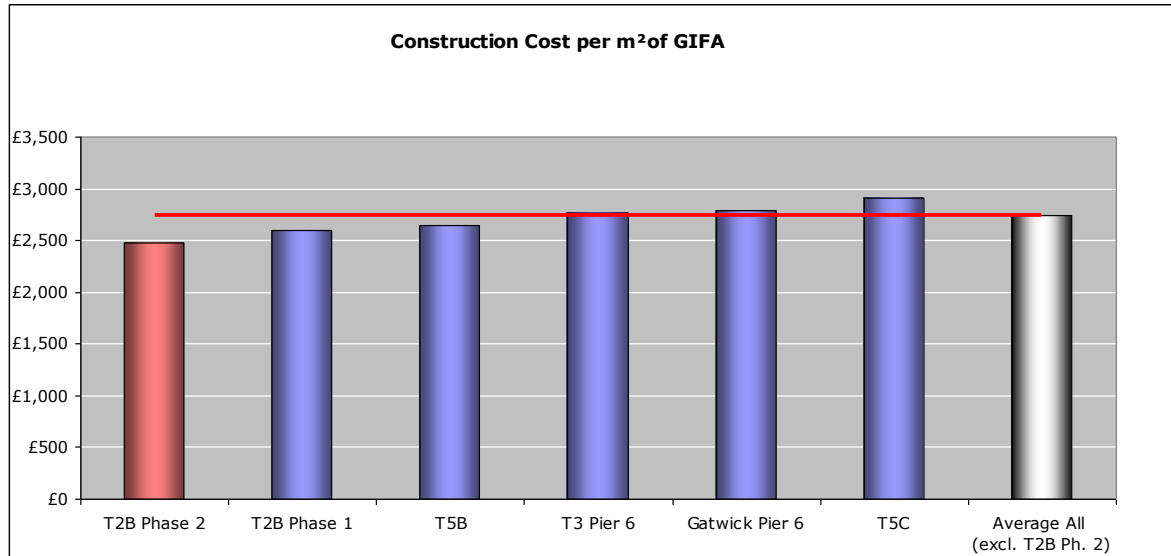
Commentary:

The above figures:
On Cost represent HAL On-Cost only

Cost Benchmark Comparisons:	
Project Name:	T2B Phase 2
Total Capital Budget (<i>Constant Prices</i>): Q5 & Q5+1 Only	£582,757,708
Guidance Notes:	
Based upon the Construction Decision cost plan the project at facility level benchmarks favourably against the sample projects at £2,473/m ² against the sample average of £2,743/m ² , and a highest benchmark of £2,910/m ² . T2B Phase 2 is achieving a 4.80% improvement on T2B Phase 1 and is achieving a 15%	

improvement on the highest sample project.

The benchmark analysis reflects pier facilities where the T2B Phase 2 project has been adjusted to exclude the basement scope to facilitate a comparable exercise to be undertaken with the sampled pier facilities.



Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.

Cost Benchmark Comparisons:	
Project Name:	T2B Apron
Total Capital Budget (<i>Constant Prices</i>): Q5 & Q5+1 Only	£60,643,257
Guidance Notes:	
The main contract was market tested through competitive tender. The construction cost (excluding Ancillary Equipment and On Cost) also compares favourably with other recent apron works at £225/m2 against £277/m2 and £353/m2 for the benchmark projects.	
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>	

Header Information

BCT No.	9805
Op No.	25564
Project Name:	Terminal 2 Information & Control Systems (ICS)

Project Overview, Objectives and Status

Overview:	
Description:	Terminal 2 wide specialist packages of the Information & Control Systems (ICS) consisting of: Network Systems Radio Systems Security Systems SCADA Monitoring Systems IT Systems Passenger Processing Systems Systems Integration – Terminal, Airport & Airline Other packages of Information & Control Systems (e.g. Cabling Integration, Building Management Systems, Fire Systems, Lighting Control Systems etc.) remain within the relevant Terminal 2 projects.
Ref. Drawings / Images: <i>(Refer to Annex A)</i>	Scope diagram shown in Annex A shows all ICS works and also indicates which elements are to be delivered by this project.
Objectives:	
HAL:	Deliver flexible, scalable and standardised solutions consistently across the Terminal 2.
Airline:	Enable the airlines and the AOC to deploy common airline systems to simplify terminal operations and improve capacity.

Project Benefits:

Efficient airline and airport operations on Terminal 2 will be dependent on the successful interaction of People, Process and Technology within the new Terminal 2 facilities. The Information & Control Systems provides the technology elements.

Status:

Programme:	Project Gateway Stage:
Terminal 2 ICS	Construction Decision

Airline Engagement:

Airlines and the AOC have been consulted in defining the requirements for the systems and have been engaged through the design process. The IT Working Group was formed in 2008 and met fortnightly since 2009. Initially this included representatives of the AOC, the STAR Alliance, and the major airlines including bmi, Lufthansa, United, Air Canada and SAS. This initial phase concentrated on requirements gathering and design validation which was completed in October 2012. Subsequently, the working group has been replaced with individual sessions with all 23 airlines expected to move into the Terminal, to further define each airline's system deployment plan.

Project Delivery

Current Control Budget:			
Total Capital Budget (<i>Estimated At Completion</i>):		Q5	£ 72,446, 751
		Q5+1	£ 52,305, 653
		Q6	£ 3,955,249
		Total	£ 128,707,653
<i>Refer to Annex B for cost information detail.</i>			
Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
06/2009	04/2012	11/2013	Q2/2014
<i>Refer to Annex C for programme information detail.</i>			
Assumptions:			
The following points cover the significant delivery assumptions related to this project;			
Common Infrastructure Policy to minimise the extent of infrastructure to be deployed.			
Existing airport wide solutions will be deployed wherever appropriate.			
Only tried and tested technology will be deployed.			
Airlines deliver their own back office IT systems and the AOC deliver the Common Use Systems.			
Schedule integrated with T2A, T2B and MSCP schedules.			
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>			

Operational Issues

HAL Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
IT	-£5,200,000	Current view of increased Opex from Terminal 2, with target to reduce to £4m as project progresses. (For all T2A & T2B ICS)
Engineering	-£900,000	Current view of increased Opex. (For all T2A & T2B ICS)
Assumptions:		
The following points cover the significant operational assumptions related to this project;		
Opex has been assessed from historic data and will be refreshed following transition to IT Outsourcing.		

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
		Not defined
Assumptions:		
The following points cover the significant operational assumptions related to this		

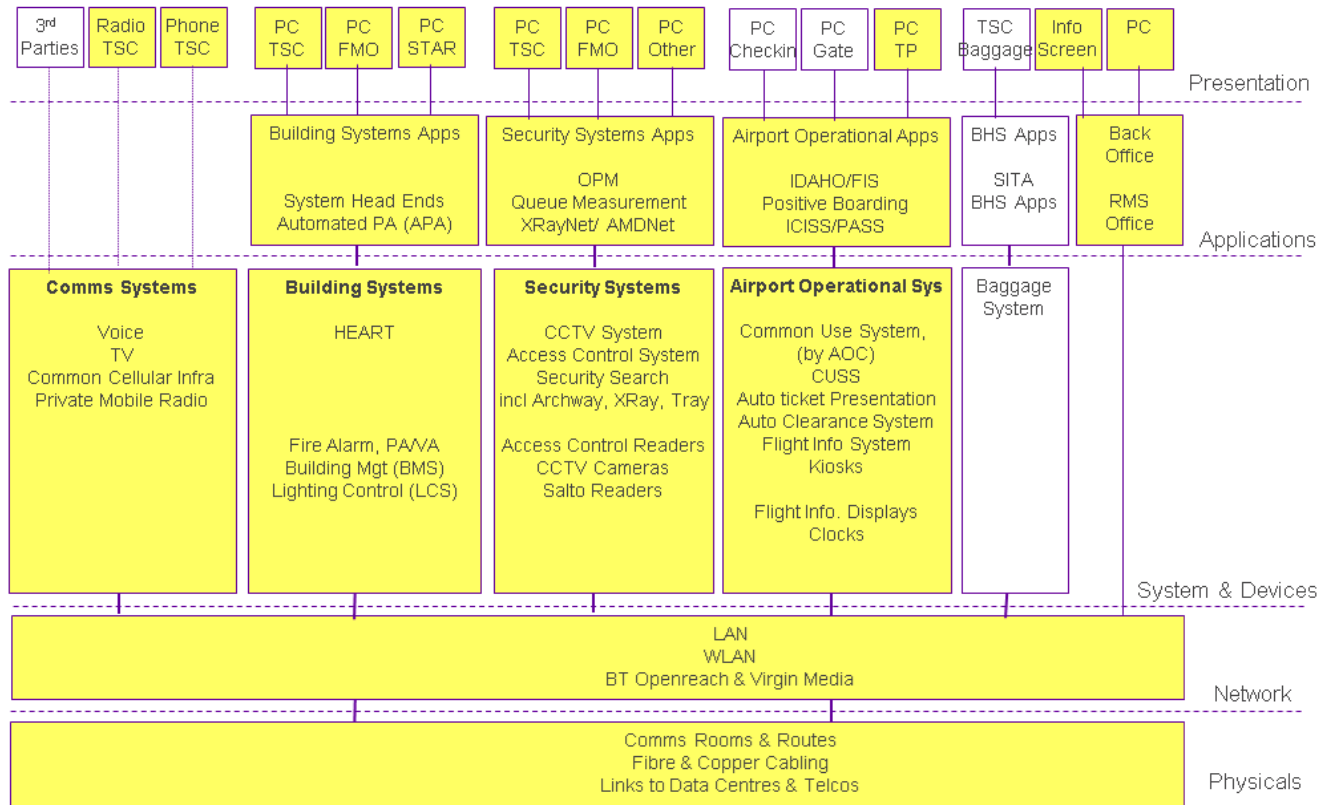
project;
Implementation of Common Infrastructure and Common Systems for the Airline should reduce the Opex costs for all airlines.

Average Asset life:	
Average Asset Life:	10 Years
Commentary:	
Asset life for ICS varies depending on individual systems, and hence varies from 5 years to over 20 years.	
<i>Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.</i>	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	8.0p
Commentary:	
None.	
<i>Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only.</i>	

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project.
Inability to achieve systems integration across terminal, airport and airlines, causing operational challenges and stakeholder issues, as a result of HAL, AOC or Airline systems issues or process misalignment.
Ability of Airlines to support the common use check-in facilities.
Ability of 3 rd party suppliers (UK Border Force and Metropolitan Police) to complete works in line with the T2 Capital Programme to ensure successful completion of Operational Readiness trials.

Annex A: Overview: Reference Drawing / Image:

IT Scope – by system



Annex B: Project Delivery: Cost Information:

Project Information

Project Name: Terminal 2 Information & Control Systems
BCT No.: 9805

Cost Information

All information extracted from March 2013 month end process

Base Costs:	£ 98,508,286	76	%
On-Cost:	£ 27,235,198	21	%
Inflation	£ 269,720	1	%
Opportunity	£0	0	%
Risk	£ 2,694,449	2	%
Total	£	100	%
	128,707,653		

Commentary:

The Performance Baseline budget has increased since the last report owing to the transfer of budget and work scope from other Terminal 2 sub-programmes:

Transfer In –	Automation of Segregation of Domestic passengers; Celsius population; T2AA ICS Systems; Baggage Systems Integration; procurement and installation of CUSS Kiosks, Automated Ticket Presentation gates, Security Search Lanes and Automated Clearance Gates; T2B Apron & Stands ICS Systems, T2B Stands Connectivity, MSCP Phase 1A ICS Systems.
Transfer Out –	ACP Consolidation, Switch Looms and T2B Radio Passive Equipment

Cost Benchmark Comparisons:	
Project Name:	Terminal 2 ICS
Total Capital Budget (<i>Constant Prices</i>):	£132,164,008 (Mar '13 Performance Baseline)
Guidance Notes:	
ICS by its nature is driven by airline and passenger expectations, regulatory requirements, and HAL's aspiration's to provide a flexible and future proof terminal.	
Benchmarking against floor area provides an indication but should be considered with caution as functionality of the terminal is not proportional to its size.	
A combined benchmark for ICS across T2A & T2B shows a cost of £511 per m ² , which is within the range of £270 - £545 per m ² for projects from Stansted	

Extension through to Terminal 5. This confirms that T2A & T2B ICS compare favourably with other developments.

Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.

Header Information

BCT No.	3814
Op No.	23451
Project Name:	MSCP2 (Previously MSCP EAST) New Build Phase 1&1A

Project Overview, Objectives and Status

Overview:	
Description:	MSCP2 New Build & Forecourt to serve the T2 Campus
Ref. Drawings / Images: <i>(Refer to Annex A)</i>	Refer to Annex A.
Objectives:	
HAL:	<p>Heathrow's project objectives are to provide:</p> <p>Short stay parking facilities for T2A and the consequential net retail income.</p> <p>Direct passenger access to and from T2A.</p> <p>The transition towards a free flowing central terminal area road network.</p> <p>Delivery of MSCP2 Phase 1A to minimise the expected impacts on Phase 1 operation during the building of Phase 2.</p>
Airline:	<p>The Airline community objectives:</p> <p>Support the co-location of the STAR Alliance.</p> <p>Direct passenger access to and from the terminal.</p> <p>Support airline community revenue opportunities through commercial products.</p>

Project Benefits:	
<p>MSCP2 Phase 1 Project Benefits:</p> <p>ASQ – supporting the LHR ASQ targets: ambience of the airport / ground transportation to and from the airport.</p> <p>QSM – supporting the LHR QSM targets: ease of getting to the terminal / ease of finding a space.</p> <p>Sustainability benefits - CO2 emission reductions.</p> <p>Net retail income increase.</p> <p>MSCP2 Phase1A Project Benefits:</p> <p>Support ASQ and QSM targets by providing opportunity for MSCP2 Phase 1A (part build of phase 2), thereby mitigating operational impact dis-benefits during construction of Phase 2.</p>	

Status:	
Programme: T2	Project Gateway Stage:
MSCP2 Phase 1	Implementation Phase
MSCP2 Phase 1A	Solution Development / Definition

Airline Engagement:

The airline community have been engaged throughout the full project process, signing off the project at the following gateways:

Brief Decision: 13th February 2009

Options Decision: 8th June 2010 (interim) and 9th November 2010 (full)

Scheme Design Gateway: 4th August 2010

Construction Decision: 10th January 2011

Phase 2 Options Gateway – 26th August 2011

Further updates have been provided within the Eastern Campus Stakeholder Board (ECSPB), including the request for full Sanction and Funding for Phase 1A in November 2012.

Project Delivery

Current Control Budget: Phase 1 and 1A EAC	
Total Capital Budget (Estimated At Completion):	Q5: £82,592,707 Q5+1: £78,180,376 Q6: 5,993,592 Total Phase 1 & Phase 2: £166,766,675

Refer to Annex B for cost information detail.

Schedule:

MSCP2 Phase 1 & 2 Brief Decision:	MSCP2 Phase 1 Start on Site:	MSCP2 Completion on Site:	MSCP2 Operational Use Commences:
02/ 2009	05 / 2011	Phase 1: 08/2013 Phase 1A: 03/2014	Phase 1 and 1A Q2/2014

Refer to Annex C for programme information detail.

Assumptions:

The following points cover the significant delivery assumptions related to this project:

Project Scope (Phase 1):

New short stay multi-storey car park, with integral forecourt provision at high and apron levels. (Kerb length provision to suit car park footprint) and vehicular vertical circulation via external ramps (2nr – one of which is recirculation only).

Landside infrastructure services associated with the decommissioning of the ESR Gantry.

Walkways and link bridges at arrivals and departures level to provide passenger connectivity between the car park and terminal building, within the area of the terminal canopy (covered court); including vertical circulation via lifts and escalators

Extension of the existing subway system to provide public transport passenger connectivity to terminal 2

Landscaping to the external areas of the car park and road network.

Accommodation associated with the car park operator

Motorcycle and bicycle parking

Phase 1 Delivery Scope:

Provision of facilities to align with the opening of T2A phase 1

1340 space multi-storey car park within integral forecourt provision at high and apron level (kerb length provision appropriate to the building footprint) , with 2 external ramps

Reconfiguration of the road network to suit the phase 1 MSCP 2 delivery solution, (roads and ramps), T3 approach road, control post 5 and bus station exit.

Infrastructure services relocation associated with the decommissioning of the southern section of the ESR gantry only.

Motorcycle and bicycle parking facilities.

Landscaping associated with phase 1 delivery, within Covered Court and outside of footprint.

Operator's accommodation / Art installation in Covered Court.

Phase 1A & Enabling works Delivery Scope:

Removal of the ESR Gantry (Northern section) and associated service re-provision.

Demolition of the OCT (Phase 3).

Relocation of the Multi Faith Prayer Room (MFPR).

Rerouting of the roads into Phase 2 configuration.

Demolition of the Queen's Building Footbridge.

Phase 1A – Delivery of Level 00.

Phase 1A – Delivery of Level 10 with basic fit-out (white lining / lighting).

Exclusions:

Demolition of the old MSCP 2 car park.

Demolition of the old control tower (Phase 1 & 2).

Reconfiguration of T3 forecourt or MSCP 3 entrance.

Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.

Operational Issues

HAL Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Retail Income	£11,900k	MSCP East Phase 1 only
Opex	£-1,880k	MSCP East Phase 1 only
Assumptions:		
The following points cover the significant operational assumptions related to this project;		
Opex composed of: Cleaning and maintenance Staffing (3 rd party) Utilities Business Rates Management fees Other variable operational costs		

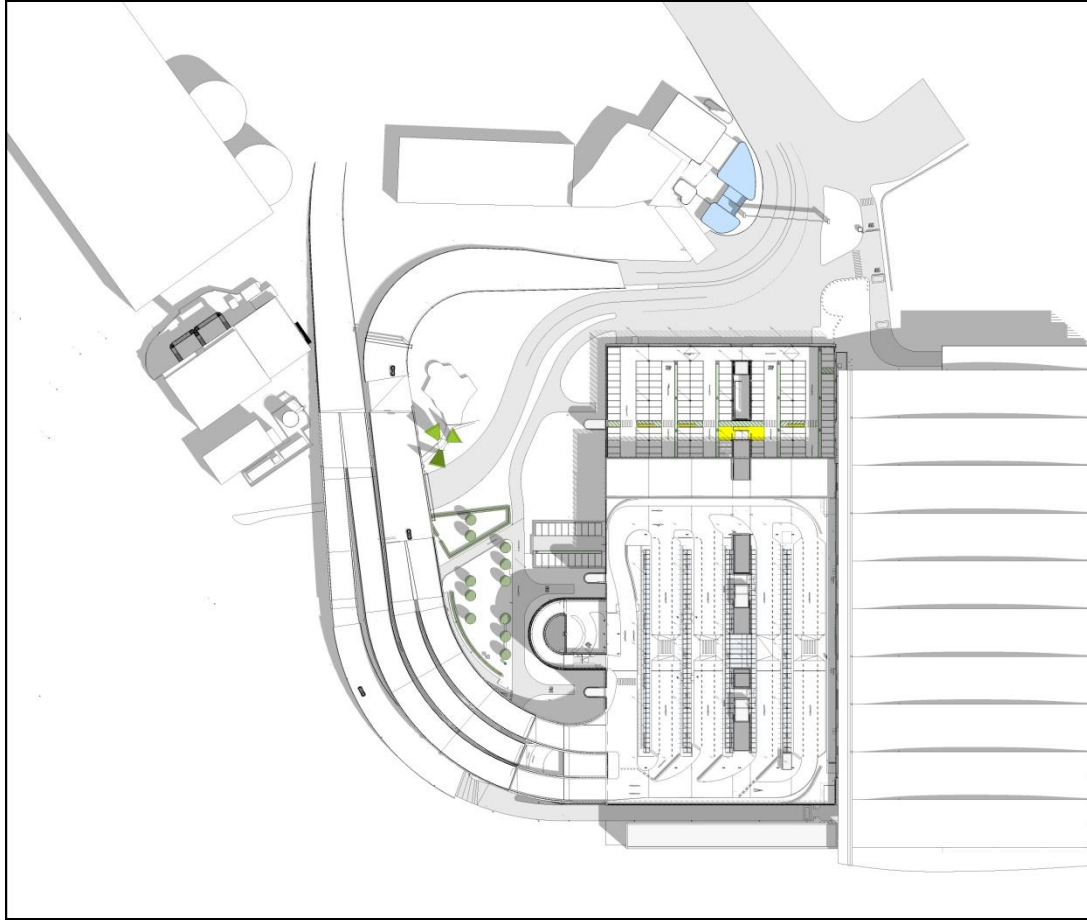
Phase 1A – As a car park extension, there is no increase to staffing costs, nominal increase to management costs and an additional rateable cost. Opex expected to total approximately £92,000 p.a.
 Revenue Income – as the car parking on level 10 may not be for customers any revenue is classified as opportunity.

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
		Not defined
Assumptions:		
The following points cover the significant operational assumptions related to this project;		
None.		

Average Asset life:	
Average Asset Life:	30 Years (Roads and Ramps)
Commentary:	
The asset life of the MSCP and Roads has been identified as 30 years; however the car park does not attract depreciation.	
<i>Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.</i>	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	
Commentary:	
None.	
<i>Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only.</i>	
Non Construction Risk:	
The following points cover any significant areas of risk for the Airline Community regarding this project.	
The following risks associated with the bringing into use of the MSCP2 Phase 1 project have been identified:	
The CTA road operations may be affected by construction activities leading to disruption.	
The following risks have been identified associated with the enabling works for Phase 2:	
CTA road operations may be affected by construction activities	

Annex A: Overview:

MSCP EAST Phase 1 General Arrangement



Annex B: Project Delivery: Cost Information:

Project Information

Project Name: MSCP 2

BCT No.: 3814

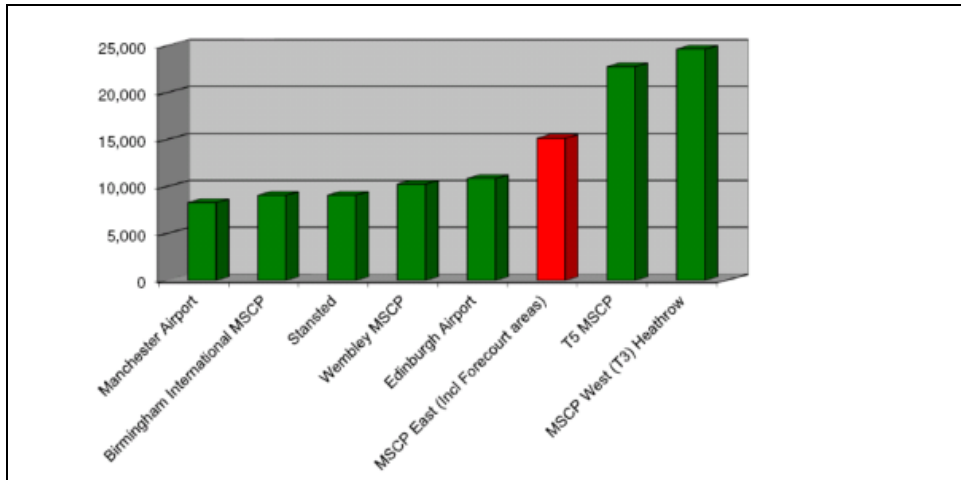
Cost Information

All information extracted from March 2013 month end process

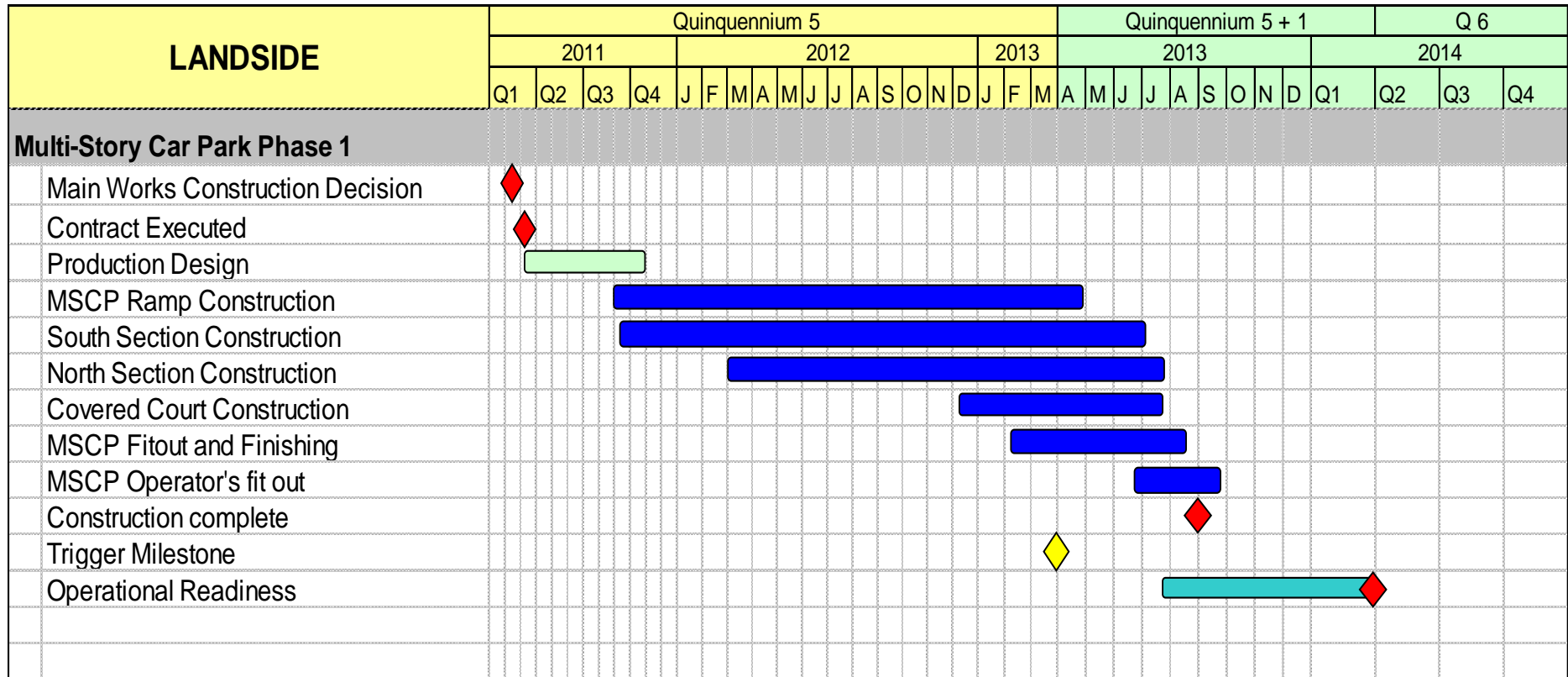
Base Costs	£151,866,836	91%
On-Cost	£7,081,471	4%
Inflation	£852,996	1%
Opportunity	-£3,006,018	-2%
Risk	£9,971,390	6%
Total	£166,766,675	

Cost Benchmark Comparisons:	
Project Name:	New Build MSCP2 (previously MSCP EAST)
Q5 Total Capital Budget (<i>Constant Prices</i>):	£ 172,279,492
Guidance Notes:	
MSCP2 Phase 1 cost per parking space compares well to projects of a similar design standard at Heathrow (LHR MSCP 5 and MSCP West) and with external samples. This has been achieved through the "open market" tendering process undertaken.	
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>	

MSCP EAST Phase 1 Benchmarking Graph – cost per parking space



Annex C: Project Delivery: MSCP EAST Phase 1 High Level Schedule



Note: This does not presently include Phase 1A schedule as this has not yet been through gateway approval.

Header Information

BCT No.	9723
Op No.	25032
Project Name:	T2 Ancillary Accommodation

Project Overview, Objectives and Status

Overview:	
Description:	This project will provide the facilities and deliver the following business benefits: Accommodation block for ramp and baggage operations of 2,100m2 when T2A phase 1 becomes operational. An accommodation facility that fits with the equipment parking strategy, aligned to the location of the ramp and baggage equipment.
Ref. Drawings / Images: <i>(Refer to Annex A)</i>	See Annex A. Scope Overview Image Drawing
Objectives:	
HAL:	Provide accommodation for airline handling agents and useable ramp parking in line with overall T2A requirement.
Airline:	Operational Efficiency and service improvement.

Project Benefits

Operational Efficiency – Improve airport operations every day.
Service Improvement – Succeed through airline success.

Status:

Programme:	Project Gateway Stage:
T2 Programme	Implement Phase

Airline Engagement:

Brief Decision Gateway – December 2009
Brief Sign Off – June 2010
Options Decision Gateway – October 2010
Construction Decision Gateway – November 2011

In addition to this there have been fortnightly stakeholder meetings with the STAR Alliance and regular reviews with handlers as and when required during the project.

During the Occupancy review, stakeholder engagement was deferred to internal stakeholders – Airside Approvals Board (Undercroft and parking), HAL Property (Accommodation)

Project Delivery

Current Control Budget:

Total Capital Budget <i>(Estimated At Completion)</i> :	Q5: £ 6,678,562 Q5+1: £ 8,997,559
---	--------------------------------------

			Total: £ 15,676,121
<i>Refer to Annex B for cost information detail.</i>			
Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
01/2010	02/2012	Q4 / 2013	Q2/ 2014
<i>Refer to Annex C for programme information detail.</i>			
Assumptions:			
The following points cover the significant delivery assumptions related to this project;			
Current scheme assumes that equipment parking will be provided underneath the accommodation only. The building will be finished to a "CAT A" standard and handed to HAL Property to manage tenant fit outs. Project works needs to be handed over to allow sufficient time for tenant fit out to be completed in advance of T2 Operational Readiness. The handover from HETCo of the full work site for the T2AA project takes place on / before the 31 st March 2012. All airline / handler decanting is excluded from the project scope. Services are to be taken from the cooling station. Tenants not yet confirmed following T2 Occupancy Review. There are four ground handlers for Terminal 2.			
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>			

Operational Issues

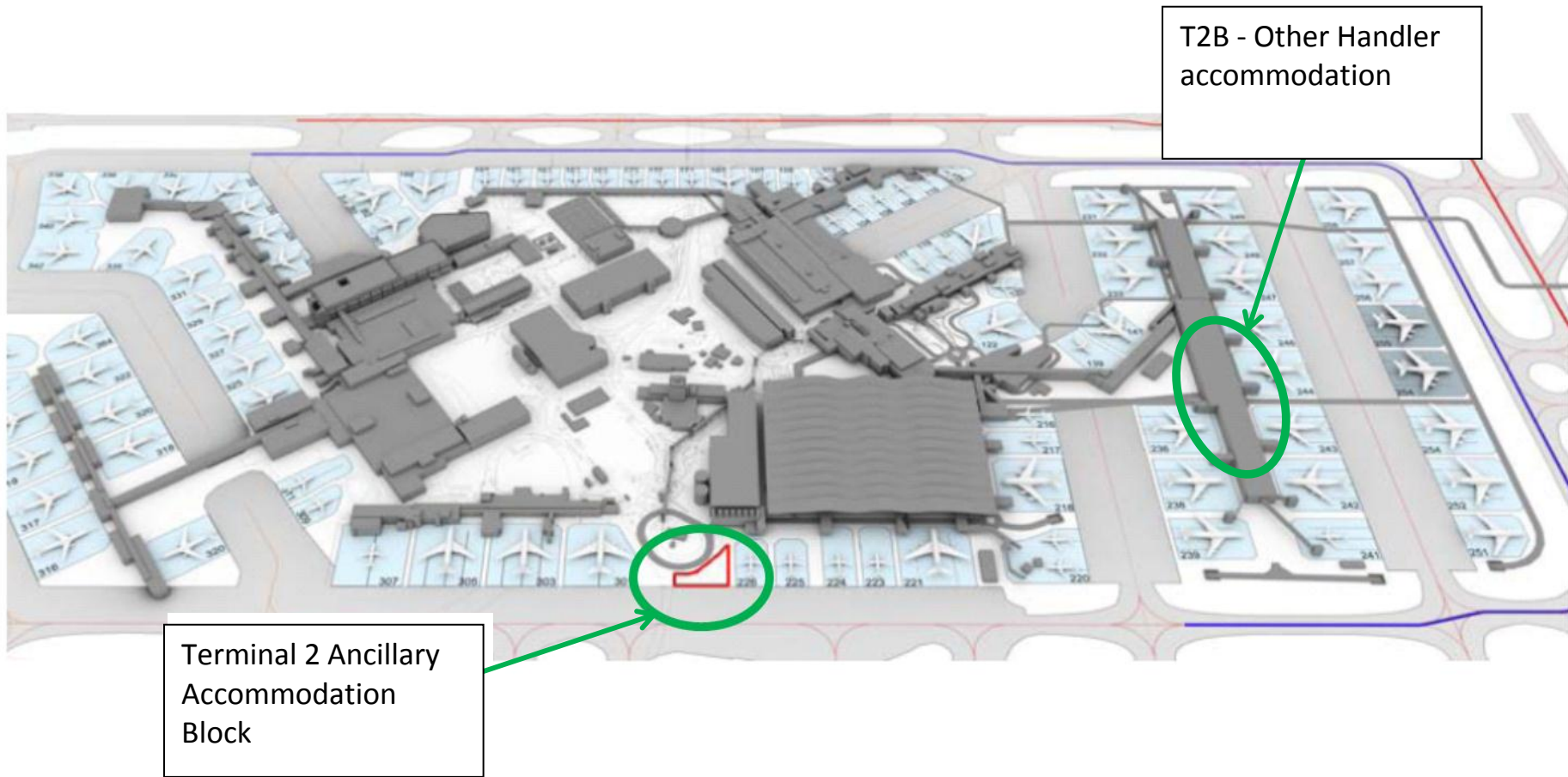
HAL Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Property	£710k	Delta between available accommodation for rent in T1 and the space provided within T2B and the accommodation block.
Cleaning	-£16k	Cleaning for the new accommodation block
Maintenance	-£70k	Maintenance for the new accommodation block
Utilities	-£19k	Utilities costs for the new accommodation block
Rent and Rates	-£81k	Rates for new accommodation block
Assumptions:		
The following points cover the significant operational assumptions related to this project;		
Space in T1 pier 4 & pier 4A is vacated and available to be let to another party. Space in T1 pier 3 is vacated, but is not available to be let to another party.		
Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
		Not yet defined.

Assumptions:	
The following points cover the significant operational assumptions related to this project;	
Airlines and handlers are serving the same number of airlines when T2A opens as they were prior to opening.	

Average Asset life:	
Average Asset Life:	40 Years
Commentary:	
None.	
<i>Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.</i>	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	1.9p
Commentary:	
None.	
<i>Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only.</i>	

Non Construction Risk:	
The following points cover any significant areas of risk for the Airline Community regarding this project.	
The site is constrained by the transfer coaching route to T1 on one side, the taxiway on another and the cargo tunnel on the other side. Currently it is anticipated that there will be no impact on the operation, but there is a risk that the transfer coaching route to T1 will need to be relocated during construction.	

Annex A: Overview: Reference Drawing / Image:



Annex B: Project Delivery: Cost Information: (Q5 and Q5 +1)

Project Information

Project Name: T2 Accommodation and Ancillary Facilities
BCT No.: 9723

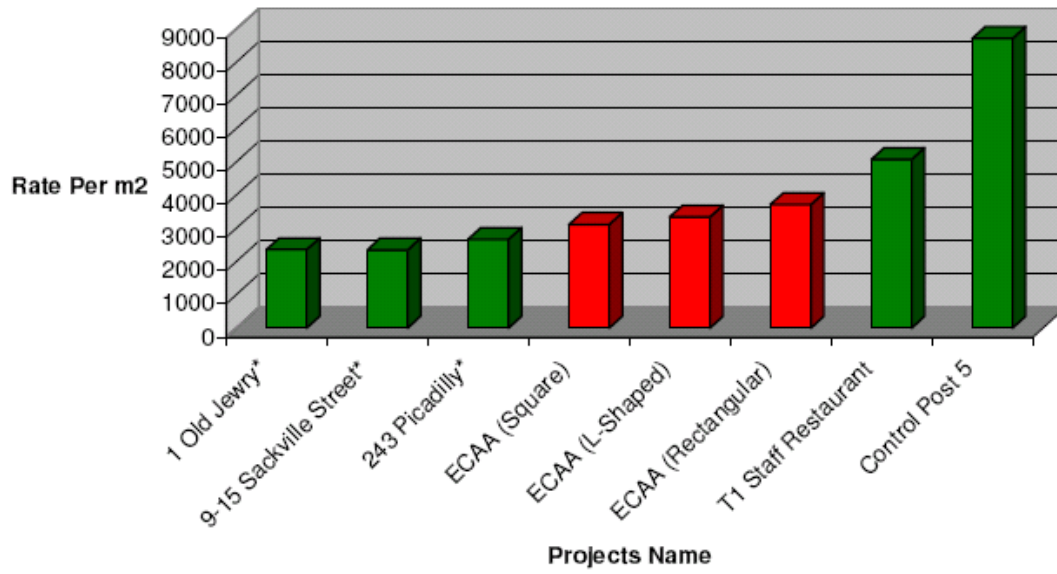
Cost Information

All information extracted from March 2013 month end process.

Base Costs:	£13,530,564	85.8	%
On-Cost:	£1,648,449	10.5	%
Inflation	£0	0.0	%
Opportunity	-£0	-0.0	%
Risk	£497,108	3.2	%
Total	£15,676,121	100	%

Cost Benchmark Comparisons:	
Project Name:	T2 Accommodation Equipment and Ancillary Facilities
Total Capital Budget (<i>Constant Prices</i>):	£26,272,519
Guidance Notes:	
<p>The graph below demonstrates that T2AA Option 11 benchmarks well against other New build projects at London Heathrow, but sits marginally above similar projects outside of the airport environment. This is explained by abnormal, such as the stilted nature of the design, the relatively small area of the build and working in an airside environment.</p> <p>This graph also demonstrates the cost differential between the proposed footprints of Option 11. The square shaped building works out at £3,069/m², the L-shape at £3,306/m², and the rectangular shape at £3,655/m², which is explained by the differing wall to floor ratios of each shape. The L shaped option works out near the average of the 3 options at £3,343/m², and has been picked as the favoured one at this stage. These efficiencies will be analysed further during the next design stage.</p>	

ECAA New Build Benchmark data



Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.

Appendix B: Western Baggage Product

3801	T3 Integrated Baggage System
10712	T3IB Transfer Docks Relocation
9992	Heathrow Integrated Baggage System (HIBS)
10658	T5 Western Baggage Upgrade
10662	T5 Early Bag Store Capacity Increase
10545	T4 APV HBS Replacement

Activity ID	Activity Name	Remaining Duration	Start	Finish	2013												2014												2015														
					A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M															
Western Baggage Product					780	02-Apr-13	31-May-16																																				
Design & Procure					379	02-Apr-13	08-Oct-14																																				
Other					379	02-Apr-13	08-Oct-14																																				
10545-A	T4 APV summary design	16	02-Apr-13	23-Apr-13																																							
10662-A	T5 EBS expansion design	379	02-Apr-13	08-Oct-14																																							
10712-A	T3IB Transfer Docks design	167	02-Apr-13	25-Nov-13																																							
Implement					676	02-Apr-13	18-Dec-15																																				
T3IB					676	02-Apr-13	18-Dec-15																																				
03801-C	T3IB Building	146	02-Apr-13	25-Oct-13																																							
03801-D	T3IB Baggage	362	02-Apr-13	15-Sep-14																																							
03801-E	T3IB HBS Existing Building	431	02-Apr-13	19-Dec-14																																							
03801-G	T3IB IT	676	02-Apr-13	18-Dec-15																																							
03801-H	T3IB Existing buildings - buildings	292	16-Sep-14*	18-Nov-15																																							
03801-J	T3IB Existing buildings - baggage	658	26-Apr-13*	18-Dec-15																																							
Other					371	02-Apr-13	26-Sep-14																																				
09992-B	Heathrow Integrated Baggage System (HIBS)	148	02-Apr-13	29-Oct-13																																							
10545-B	T4 APV HBS replacement production design	61	24-Apr-13	19-Jul-13																																							
10545-C	T4 APV HBS replacement	57	22-Jul-13	09-Oct-13																																							
10658-B	T5 Western Baggage Upgrade	249	02-Apr-13	02-Apr-14																																							
10712-B	T3IB Transfer Docks Relocation - Modify Building	80	26-Nov-13	31-Mar-14																																							
10712-C	T3IB Transfer Docks Relocation - Main Installation	124	01-Apr-14	26-Sep-14																																							
Commission					723	24-Jun-13	31-May-16																																				
T3IB					723	24-Jun-13	31-May-16																																				
03801-K	T3IB Test transition and transition	723	24-Jun-13*	31-May-16																																							
Other					298	30-Oct-13	23-Jan-15																																				
09992-D	Heathrow Integrated Baggage System (HIBS) commission	79	30-Oct-13	03-Mar-14																																							
10712-D	T3IB Transfer Docks commission	75	29-Sep-14	23-Jan-15																																							

Implementation
 Sub Project Impl.
 Design
 Implementation
 Transition
 Milestone

Header Information

BCT No.	3801
Op No.	22380
Project Name:	T3 Integrated Baggage System

Project Overview, Objectives and Status

Overview:	
Description:	Replacing the life expired baggage infrastructure in Terminal 3, the T3IB project delivers Heathrow's strategic baggage objectives, whilst removing equipment from the existing baggage hall, which will provide the opportunity for it to be redeveloped for other use. The project will provide the Terminal 3 airline community with a T5-equivalent baggage facility.
Ref. Drawings / Images: <i>(Refer to Annex A)</i>	Artists impression of T3 Integrated Baggage Building
Objectives:	
HAL:	Create a new single integrated direct and transfer baggage system product. Replace the life expired existing baggage system assets. Improve the baggage delivery punctuality and delivery reliability. (reduce system misconnects) Provide a system that has suitable growth capacity Contain the Operating Cost (OPEX) for the solution Produce a DfT compliant system
Airline:	As HAL

Project Benefits:

Reduces the missed bag rate to be equivalent to T5 performance levels.
Improves safety in the Terminal 3 baggage hall.
Provides adequate space within the system to enable growth.
Enables early bags to be stored and processed in advance of flight open times.
Reduction of T3 intra terminal minimum connect time.
Enables consolidation of handler operations through integration of direct and transfer baggage make-up.

Status:

Programme:	Project Gateway Stage:
Western Baggage Product	Implement

Airline Engagement:

Formal Gateway reviews have been held with the airline community at the key stages of the development process as follows:

Option Decision	13 th February 2009
Construction Decision	5 th January 2010
Construction Decision Update	8 th March 2011
Targets Confirmation	31 st January 2012

In between the formal Gateway Reviews on going weekly / monthly consultation occurs at the Baggage Stakeholder Strategy Board and The T3IB Working Group.

Project Delivery

Current Control Budget:			
Total Capital Budget (<i>Estimated At Completion</i>):		Q4 £779,540 Q5 £326,918,258 Q5+1 With Q 5 Q6 £47,289,836 Total: £374,987,634	
<i>Refer to annex B for cost information detail.</i>			
Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
24/05/2007	04/2010	09/2014	Phased from 10/2014 until 12/2015
<i>Refer to annex C for programme information detail.</i>			
Assumptions:			
The following points cover the significant delivery assumptions related to this project;			
The solution has 120% capacity provision, where 100% of the flight makeup is achieved on conventional lateral devices. The airline/handlers will operate the new processes.			
Bag to passenger ratio remain as existing as do the transfer: direct bags ratio and average flight load factors.			
The T3IB transfer docks are being delivered under a separate project.			
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>			

Operational Issues

HAL Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
All T3 baggage facilities	£5,746,000 (based on 2012 price levels)	Capacity enabling baggage projects do not attract true revenue; only recover HAL operating cost / bag costs.
Assumptions:		
The following points cover the significant operational assumptions related to this project;		
For the first year that T3IB is operating, the Opex will be higher as the existing T3 baggage system will be operating concurrently with T3IB to enable the cut-in. T3IB future OPEX relates to the facilities at T3 LIMA 18 and T3 departures transfer & O.O.G automation operation and the T3IB baggage factory.		

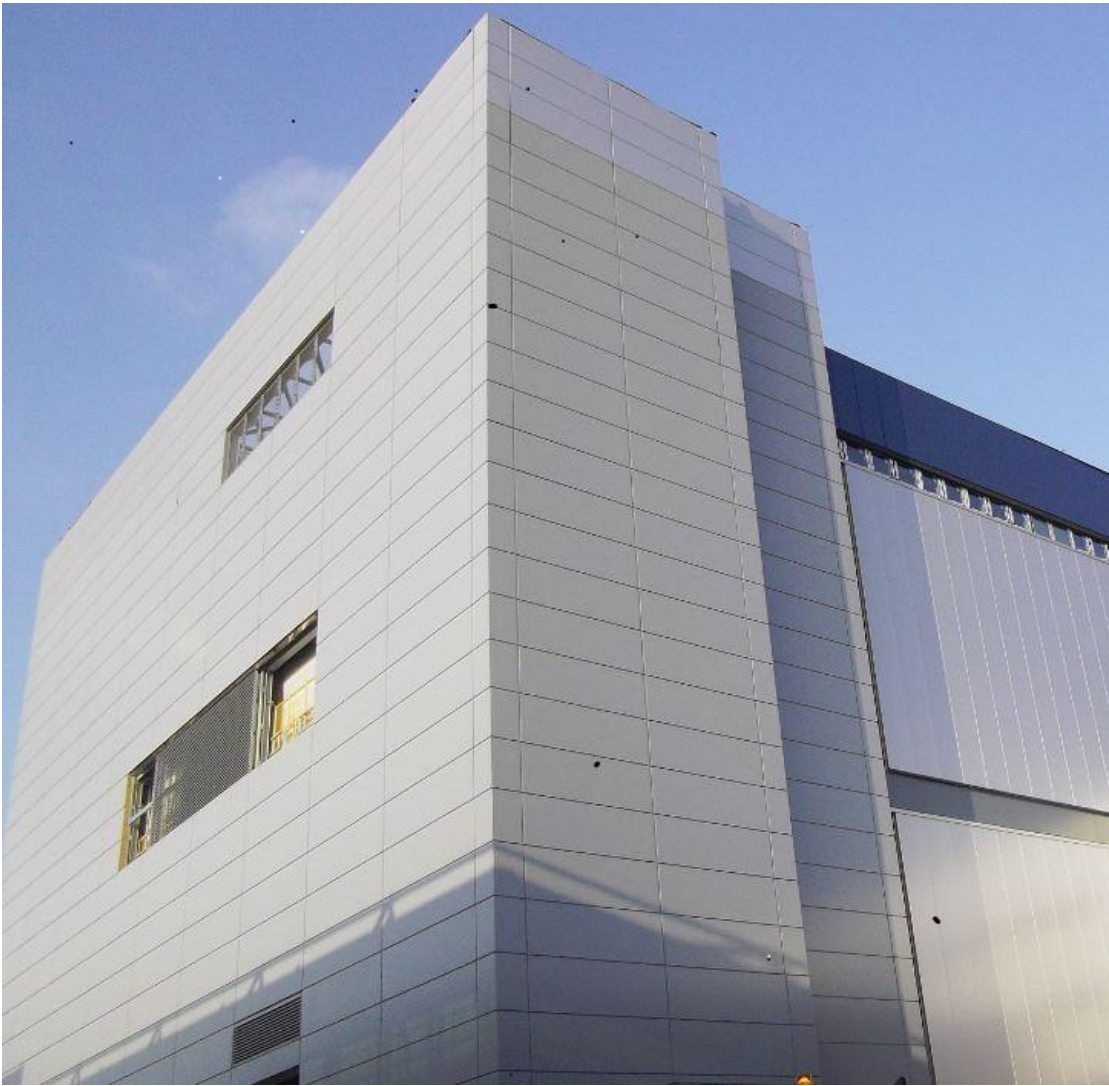
Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost	Revenue (+) / Cost (-) Impact	Commentary:

Area:	per Annum:	
All T3 baggage facilities	£3,700,000	This reduction in airline handler costs is anticipated through the integration of make-up for direct and transfer bags. Further cost reduction is expected through reduced numbers of mis-handled bags.
Assumptions:		
The following points cover the significant operational assumptions related to this project;		
Back to basics OOG in the Existing Baggage Hall		
Assumes 20% use of automation		

Average Asset life:	
Average Asset Life:	See below
Commentary:	
Existing check-in desks will be connected to new T3IB function. These are due for future replacement.	
IT	7 years
M&E	15 years
Building	25 years
<i>Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.</i>	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	£0.42
Commentary:	
The project has an impact of £0.30 in the per passenger charge through the RAB; the incremental increase in opex is £4.3m pa, which is recovered through Non-Regulated Charges.	
<i>Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only.</i>	

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project.
Whilst the project incorporates 100% conventional build, this is a conventional build within a compressed build period of 90 minutes. The airlines accept that working practices need to change to accommodate this. The use of automation is optional; if and when this product requires new working practices to be accommodated.
The early build function is a new product that requires airlines to use empty ULD in advance of flight open times. The airlines accept that ULD logistics remain their responsibility.

Annex A: Overview



Annex B: Project Delivery: Cost Information:

Project Information

Project Name: T3 Integrated Baggage System

BCT No.: 3801

Cost Information

All information extracted from March 2013 month end process

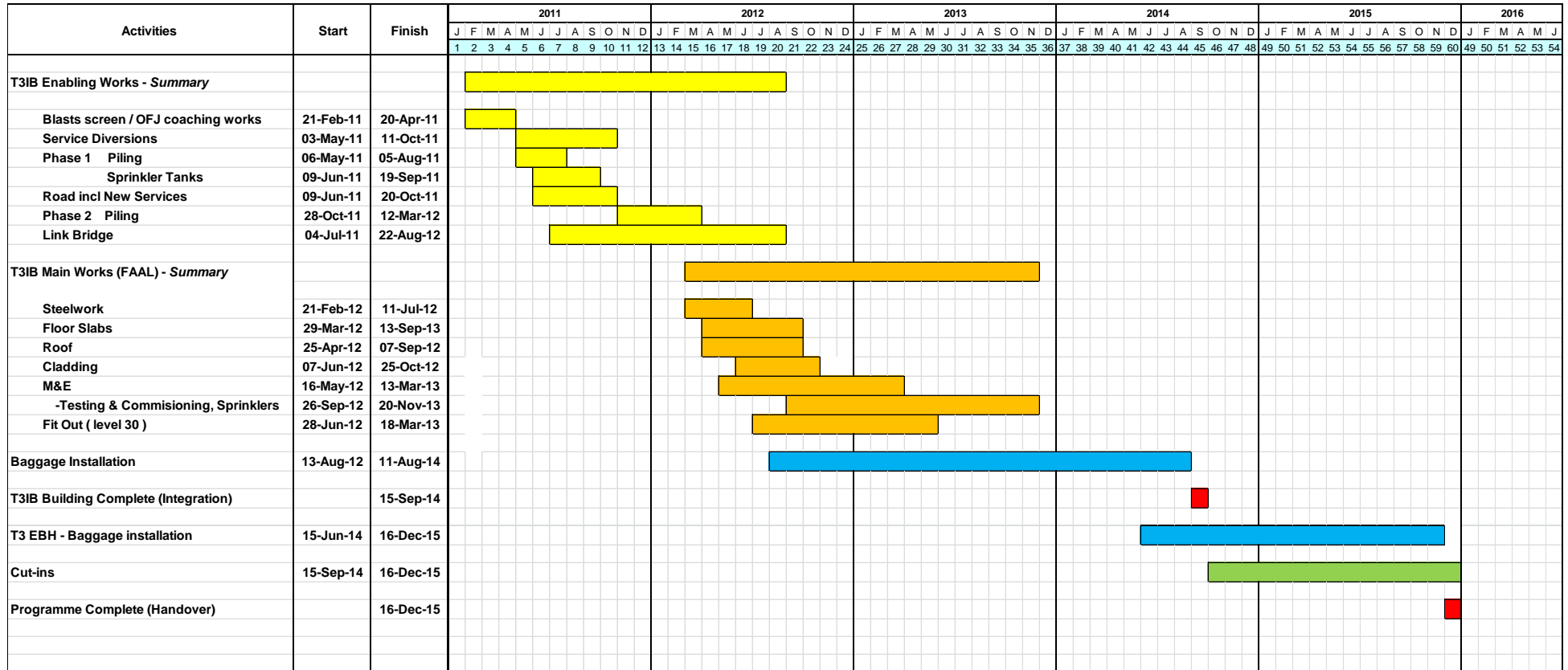
Base Costs:	309.715m	83%
On-Cost:	55.420m	15%
Inflation	3.668m	1%
Opportunity	-7.500m	-2%
Risk	13.685m	4%
Total	£374,988m	100%

Cost Benchmark Comparisons:	
Project Name:	T3 Integrated Baggage System
Total Capital Budget (<i>Constant Prices</i>):	£374,987,634
Guidance Notes:	
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>	

Annex C: Project Delivery: High Level Project Plan:

T3IB Project - High Level Programme

December 2011



Header Information

BCT No.	10712
Op No.	
Project Name:	T3IB Transfer Docks Relocation

Project Overview, Objectives and Status

Overview:	
Description:	Relocates the transfers docks planned for the Existing Baggage Hall to the Monaco Tunnel (under T3IB). As there is not sufficient space to locate all the docks in the Monaco Tunnel, 2 additional docks will converted in the WIB. The project will also enable a back-to-basics OOG facility to be built in the Existing Baggage Hall. The project is being undertaken at the request of the airlines to enable the transfers product to be moved into T3IB when T3IB opens (Oct / Nov 2014) instead of at the end of the project (Dec 2015).
Ref. Drawings / Images: <i>(Refer to Annex A)</i>	Plan of transfers docks in the Monaco Tunnel.
Objectives:	
HAL:	Provide the early integration of the T3 transfer product into T3IB for when T3IB opens. Reduce or minimise the impact to Opex. Ensure that it does not disrupt the programme for the completion of T3IB. Minimise the operational disruption and the impact on performance measures for the current T3 operation during the works. Achieve manual handling benefits where possible
Airline:	As HAL

Project Benefits:

This option and the associated benefits have been developed jointly with the airlines. The benefits of this project are:

- One-off reduced cost for the airlines through early delivery of the transfer's product for T3IB which will result in less missed transfer bags over the 15 months.
- On-going reduced cost through less missed transfers bags from shorter in-system times for intra-terminal and inter-terminal bags.
- Reduced cost through less rent and rates with less space-take in existing baggage hall.
- Reduced risk to:
 - Start-up as it would allow transfers to go first.
 - Overall T3IB programme as it would avoid significant building works behind T3 check-in, which may also even facilitate a reduction in the cut-in period.
 - To charging the airlines for the running of T3IB facility from start-up as there will be a significant increase in the proportion of the bags going into T3IB from

September 2014.

Improved OOG solution which is more flexible and which is supported by the airlines.

There are also opportunities to:

- Reduce the Minimum Connection Times (MCTs)
- Redevelop the existing baggage hall (e.g. for retail storage)

Status:

Programme:	Project Gateway Stage:
Western Baggage Product	Solution Development

Airline Engagement:

Formal Gateway reviews have been held with the airline community at the key stages of the development process as follows:

Initiate	January 2012
Options	05 th March 2013

In between the formal Gateway Reviews on going weekly / monthly consultation occurs at the following forums: The Baggage Stakeholder Strategy Board and the T3IB Working Group.

Project Delivery

Current Control Budget:

Total Capital Budget (<i>Estimated At Completion</i>):	Q5 £14.5m Q6 £1.4m Total: £15,900,000
--	--

Refer to Annex B for cost information detail.

Schedule:

Options Gateway	Start on Site:	Completion on Site:	Operational Use Commences:
5/03/2013	09/2013	09/2014	1/11/2014

Refer to Annex C for programme information detail.

Assumptions:

The following points cover the significant delivery assumptions related to this project:

- Transfer demand based on T3IB Baggage Demand Design basis v2
- Study based on current T3IB design.
- The project will have no impact on the delivery of T3IB

Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.

Operational Issues

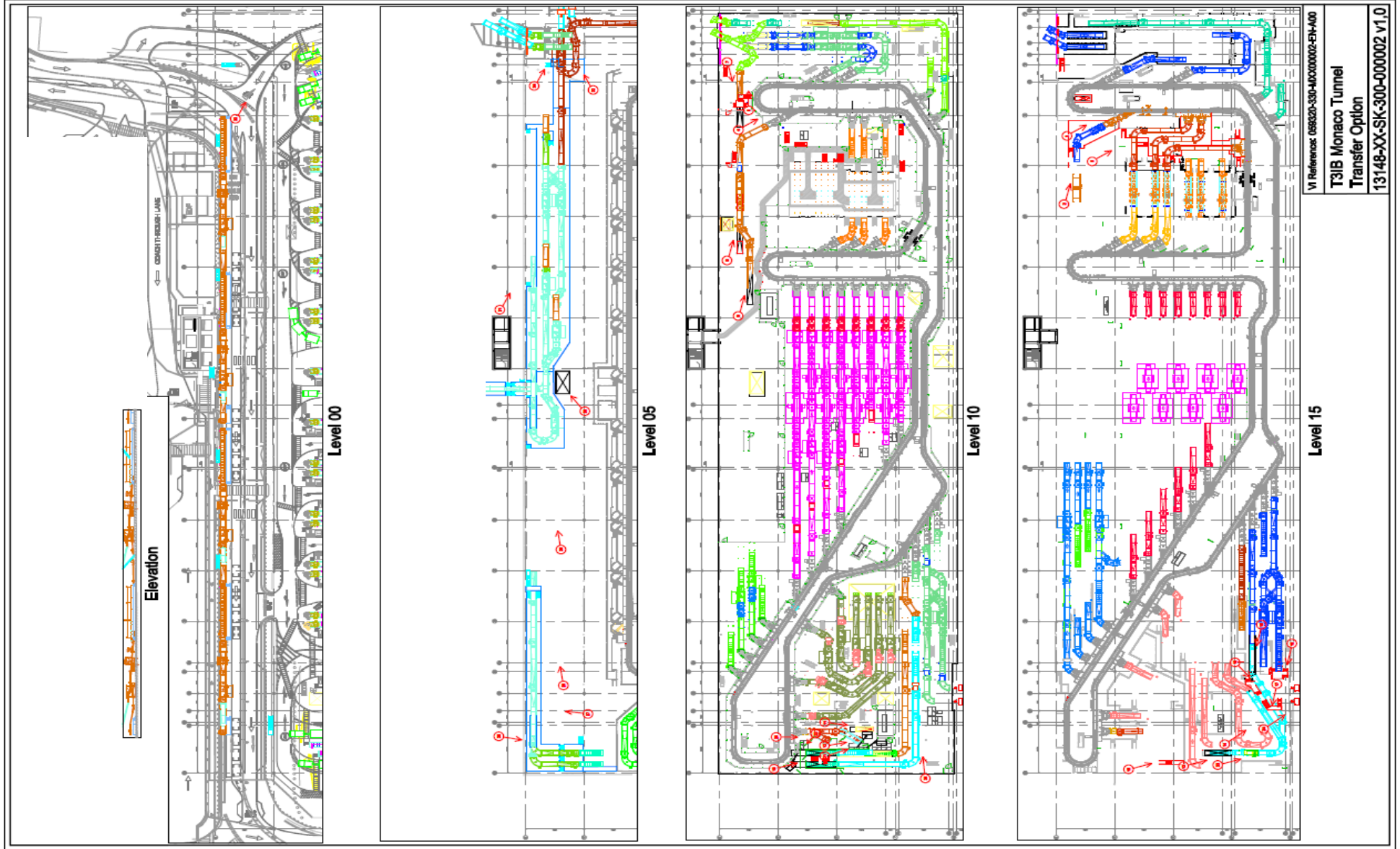
HAL Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Existing baggage hall	£300,000	This reduction in rent and rates through less space take in the Existing Baggage Hall. This cost saving is included in the overall T3IB saving which is quoted in the T3IB PDS.
Assumptions:		
The following points cover the significant operational assumptions related to this project;		
Lima 18 and Building 139 will cease to be used as transfer facilities for T3. The revised OOG scheme in the EBH will take-up less space and lead to a reduction in rent and rates.		

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Missed Bags	£1,200,000	This reduction is due to reduced journey times for transfer bags being put in the Monaco Tunnel rather than the Existing Baggage Hall. This will result in less missed bags. The airlines will also benefit from transfers going into T3IB 15 months early and this will also result in less missed bags over this period.
Assumptions:		
The following points cover the significant operational assumptions related to this project;		
There will be a 4 minute reduction in in-system times for transfer bags.		

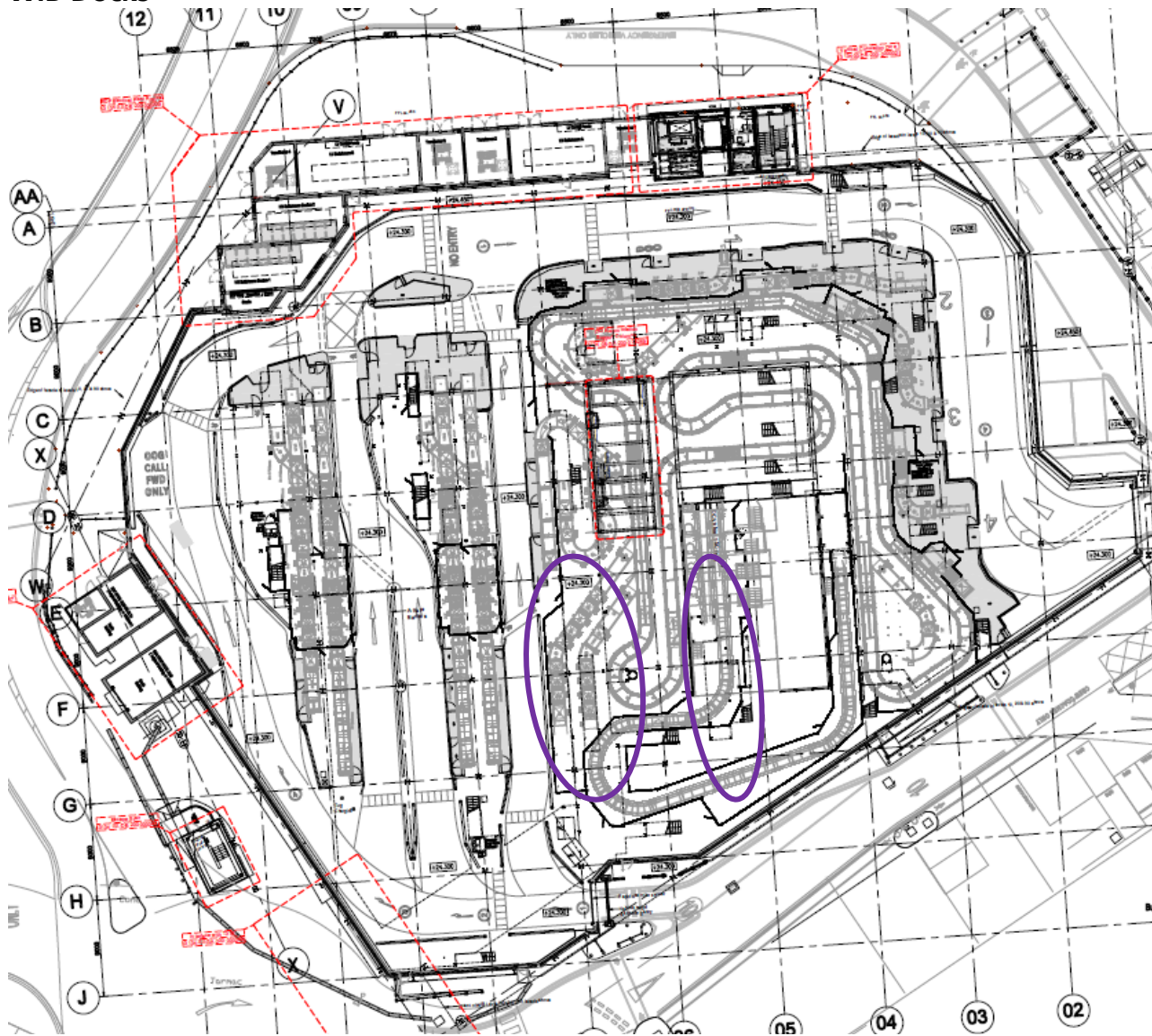
Average Asset life:	
Average Asset Life:	See below
Commentary:	
Existing check-in desks will be connected to new T3IB function. These are due for future replacement.	
IT	7 years
M&E	15 years
Building	25 years
<i>Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.</i>	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	See T3IB PDS
Commentary:	
The impact of user charges is not split out for transfers only but included in the overall T3IB PDS.	
<i>Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only.</i>	

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project.
The option to convert 2 docks in the WIB is being developed at this stage of the project. An alternative option of building 2 docks in the HCDS would attract increased CAPEX and OPEX.

Annex A: Overview:



WIB Docks



Annex B: Project Delivery: Cost Information:

Project Information

Project Name: T3IB Transfer Docks Relocation
BCT No.: 10712

Cost Information

All information extracted from March 2013 month end process

Base Costs:	£ 9.7m	60%
On Costs	£ 3.9m	25%
Risk	£ 2.3m	15%
Inflation	£ 0	0%
Total	£15.9m	100%

Cost Benchmark Comparisons:	
Project Name:	T3IB Transfer Docks Relocation
Total Capital Budget (<i>Constant Prices</i>):	£15,900,000
Guidance Notes:	
The T3IB project undertook benchmarking, and the transfer were a part of this. The T3IB Transfer Dock Relocation project will re-validate its benchmark information as part of the Development Gateway process.	
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>	

Header Information

BCT No.	9992
Op No.	25293
Project Name:	Heathrow Integrated Baggage System (HIBS)

Project Overview, Objectives and Status

Overview:	
Description:	Baggage performance information is critical if HAL is to create greater efficiency and productivity in its baggage operation. To enable this, HAL IT initiated the IT Baggage Programme in 2009 to create an integrated baggage information system to enable the entire Heathrow Baggage Product to be planned, operated and maintained as a coherent, integrated, Airport-wide solution. The IT Baggage Programme is a critical enabler for Heathrow's Baggage 2018 Operating Plan, with solutions being delivered in accordance with Heathrow IT strategy. Several "Airport-wide" solutions will be delivered by the programme, including the Airport Message Distribution (AMD) system, the Airport Data Repository (ADR) and the Management Information System (MIS). As well as critical for the future step change required in baggage operation they are also key enablers for initiatives outside Baggage, including Real-Time Heathrow and Combined Control Room
Ref. Drawings / Images: (Refer to Annex A)	Figure 1 and 2 shows the context of HIBS components including a view showing how HIBS enables services to be shared across the Airport. Figure 3 shows the high-level view of the Enterprise Service Bus (ESB) which provides the Airport Message Distribution function. Figure 4 shows the high level view of the ADR & MIS which comprises of multiple and parallel layers to increase performance and resilience. Figure 5 shows HIBS benefits map (Just ADR & MIS Elements)
Objectives:	
HAL:	HAL's project objectives are to deliver an Integrated Baggage IT System that will enable the Baggage Operation to manage the airport-wide baggage product in a coherent and consistent way across the Airport, to improve all aspects of the operation and contribute to making a step change in Transfer Baggage performance in line with Heathrow's strategic intent. HIBS achieves this through introducing consistency, simplifying topology and by enabling resources and information to be shared across the airport, allowing efficiency and performance to be increased.
Airline:	This improvement to HAL infrastructure will provide tools and improved performance which should help improve the Baggage Product and, in particular, aid in the reduction of Missed Bags.

Project Benefits:

The ADR and MIS Solution is core to realising IT Baggage Programme benefits that were

identified and approved during Programme Initiation; they are also core to enabling the delivery of the overall Baggage Strategy for Heathrow 2018 and are also an essential enabler for several non-baggage programmes, including Real-Time Heathrow and the newly initiated APOC programme.

In addition to enabling other programmes, direct benefits delivered by ADR & MIS include:

Improved Operational Information though single centralised airport baggage inventory and, together with MIS, provides airport-wide visibility and the necessary data to enable automated controls to allow baggage to be swiftly routed, tracked and managed between terminals, secure storage areas and make-up positions across the airport.

Improved recovery from failure and exceptions

Improved Information re-use and Lifecycle Management

System Replacement and Consolidation

Reduce operating cost through better operational controls and coordination through airport-wide reporting and management Information. E.g. reduce manual coding stations costs & system support

Address health and safety issues

Benefits map for the ADR & MIS elements of HIBS is shown in Annex A, Figure 5.

Status:	
Programme:	Project Gateway Stage:
Development	Implement

Airline Engagement:
Airline Engagement takes place on a monthly basis as part of the IT Baggage Steering Group, and has done since the Programme started in 2010. The naming convention of the Group has changed from a Working Group to a Steering Group as this is an endorsement forum, if there is any need for the Airlines to discuss HIBS architecturally, a Working Group will be scheduled.

Project Delivery

Current Control Budget:	
Total Capital Budget (<i>Estimated At Completion</i>):	£8,571,934
<i>Refer to Annex B for cost information detail.</i>	

Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
09 / 2009	10 / 2009	12 / 2013	10 / 2013

Refer to Annex C for programme information detail.

Assumptions:
The following points cover the significant delivery assumptions related to this project; HIBS Systems – i.e. ESB Baggage Services and ADR & MIS will be required in 2013 in order to support the integrated testing and go-live of the Baggage systems in T5WBU, T1, T2, T3IB and T4.

Assumptions that have been made in the preparation of the business case, and are fundamental to the success of the project are as follows:

Baggage Strategy is still current and supported

It is assumed that the recently reviewed 2018 Baggage Operating Strategy agreed with the AOC in May 2009, still has HAL executive support and that the reviewed strategy has not significantly changed. The HIBS Programme delivery is focussed to support this strategy and this assumption is fundamental.

Development Programmes deliver against strategy and to agreed timescales

It is assumed that the in-flight Baggage Capital Programmes are also delivering in support of the Baggage Strategy and will deliver their elements and in line with agreed specifications and timescales to integrate with the Heathrow Integrated Baggage Solution and support the overarching Baggage Strategy.

HAL SAN Storage and Long-term Archive

It is assumed that the capacity and performance of the HAL enterprise storage and backup / archive systems will be increased to cater for the storage and performance requirements of the Baggage Programmes, including those of the ADR & MIS project, as per the detailed specifications which have been supplied to the BAU storage teams.

Master Data Management

It is assumed that following the implementation of ADR & MIS, the owners of Airport Reference Data will work with the HAL Information Architect to ensure that all updates and changes to reference data are updated and maintained in the ADR and that the Information Architect will ensure that an on-going review, approval and update process for maintaining this data is agreed and implemented

Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.

Operational Issues**HAL Financial Revenue and Operational Cost (Opex) Impact:**

Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Application Support	£677,000	ADR and MIS Application Support will be provided by Cap Gemini. Figures are being agreed but projected costs are in the region of £677kpa.
Support	£191,000	Oracle Platform Support, capital licence cost and the on-going support costs
Support	TBC	Analysis on-going, once HIBS is operational, savings will be derived from decommissioning existing systems: SE MIS Merlin T5 MIS

Assumptions:

The following points cover the significant operational assumptions related to this project;

The Opex impacts of the ADR & MIS are currently subject to variation due to on-going supplier negotiations. Opex costs are in the process of being determined and validated.

Airline Financial Revenue and Operational Cost (Opex) Impact:

Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
		Expected June 2013.

Assumptions:

The following points cover the significant operational assumptions related to this project;

Operations will define the required reporting in a timely manner

Operations will begin to use the ADR / MIS environment for reporting

Average Asset life:	
Average Asset Life:	5 Years (Hardware)
Commentary:	
None.	
<i>Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.</i>	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	
Commentary:	
To be confirmed.	
<i>Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only.</i>	

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project.
None

Annex A: Overview: Reference Drawing / Image:

Figure 1: Context of HIBS programme components.

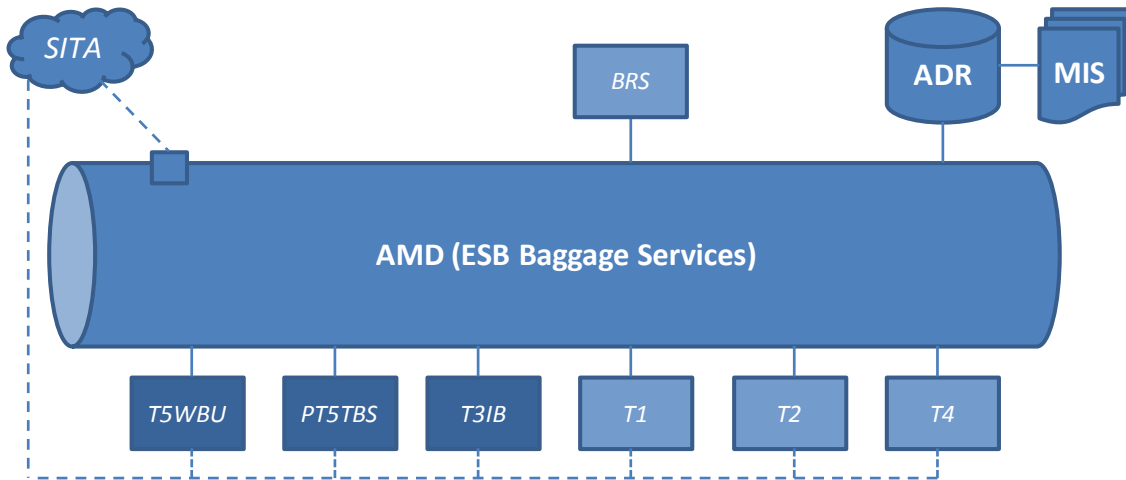


Figure 2: Context of HIBS programme components against wider Airport Strategy – Shared Services across the Airport.

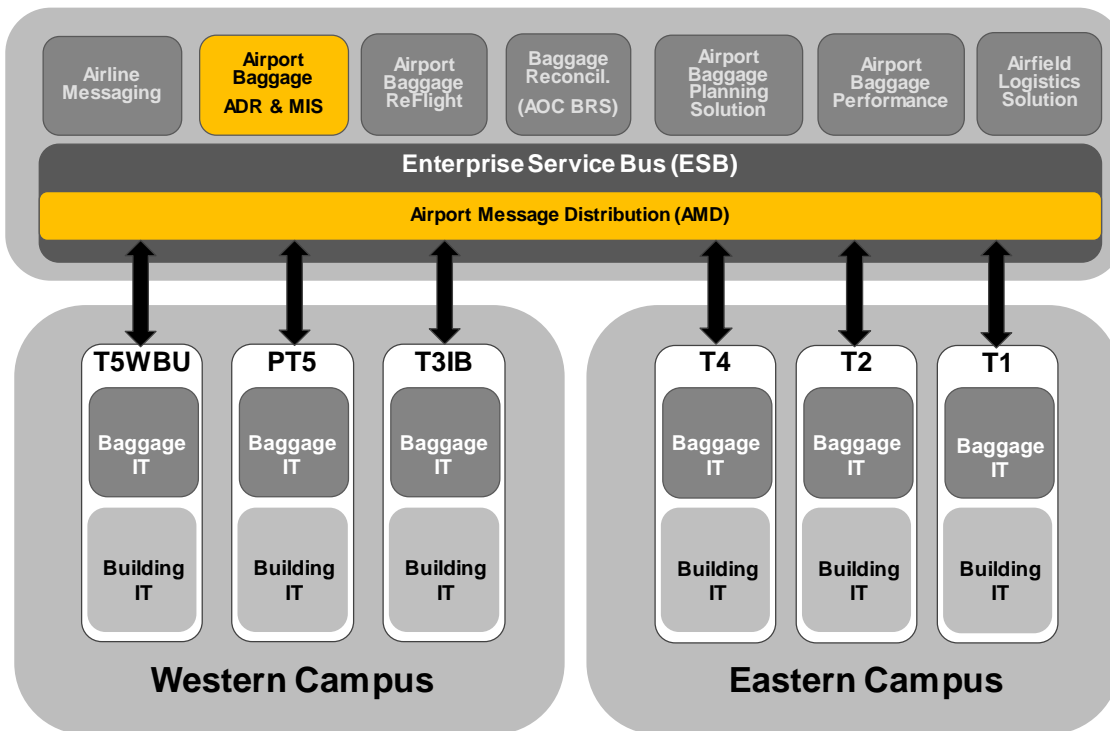


Figure 3: High Level view of ESB showing HIBS Services.

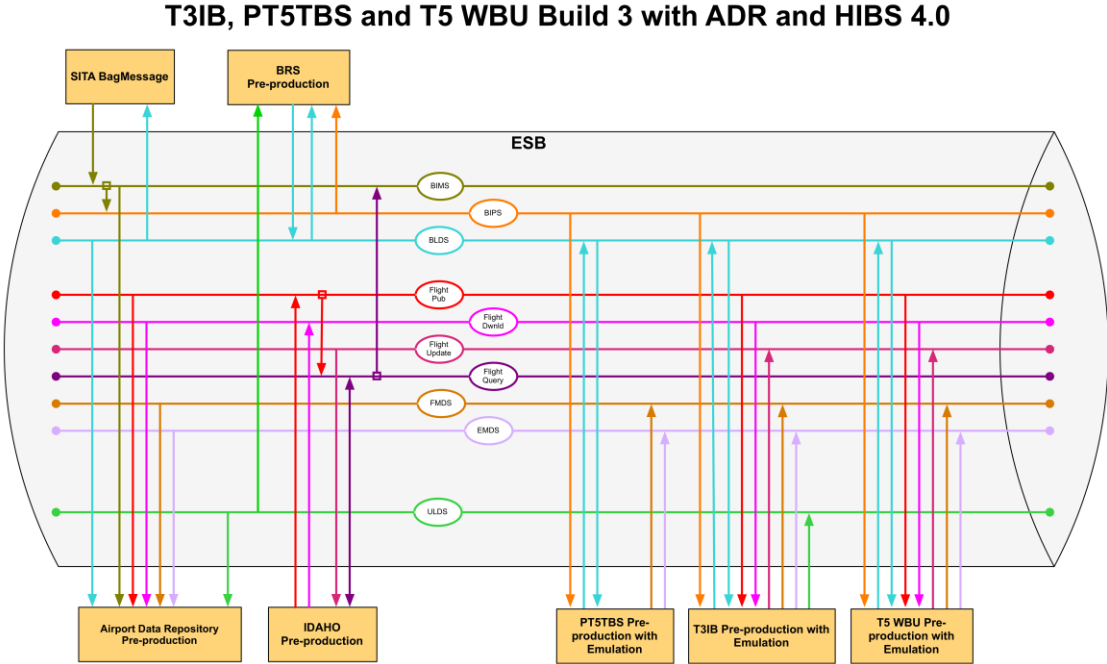


Figure 4: ADR & MIS High Level Design showing multi-layering to increase performance and resilience

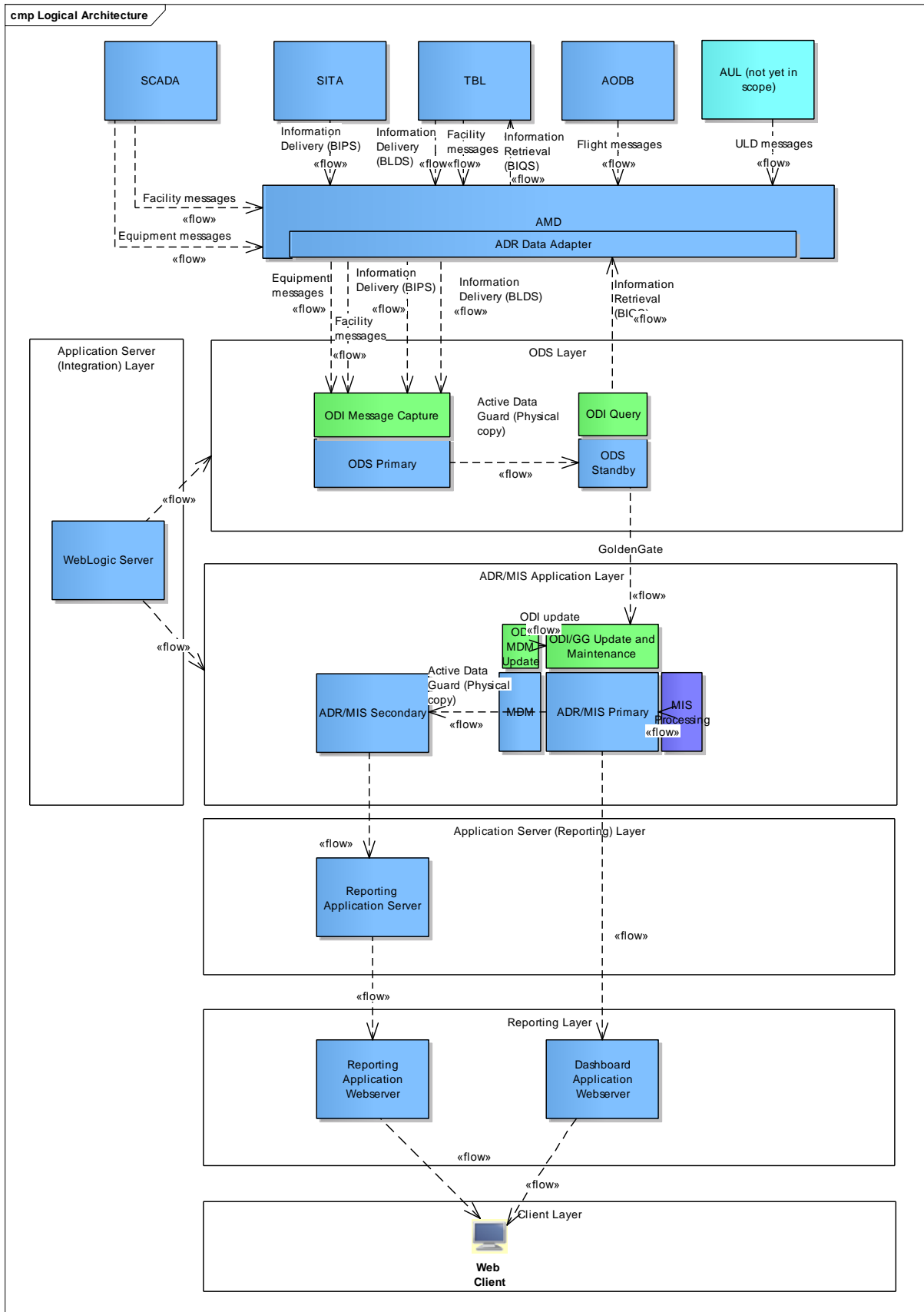
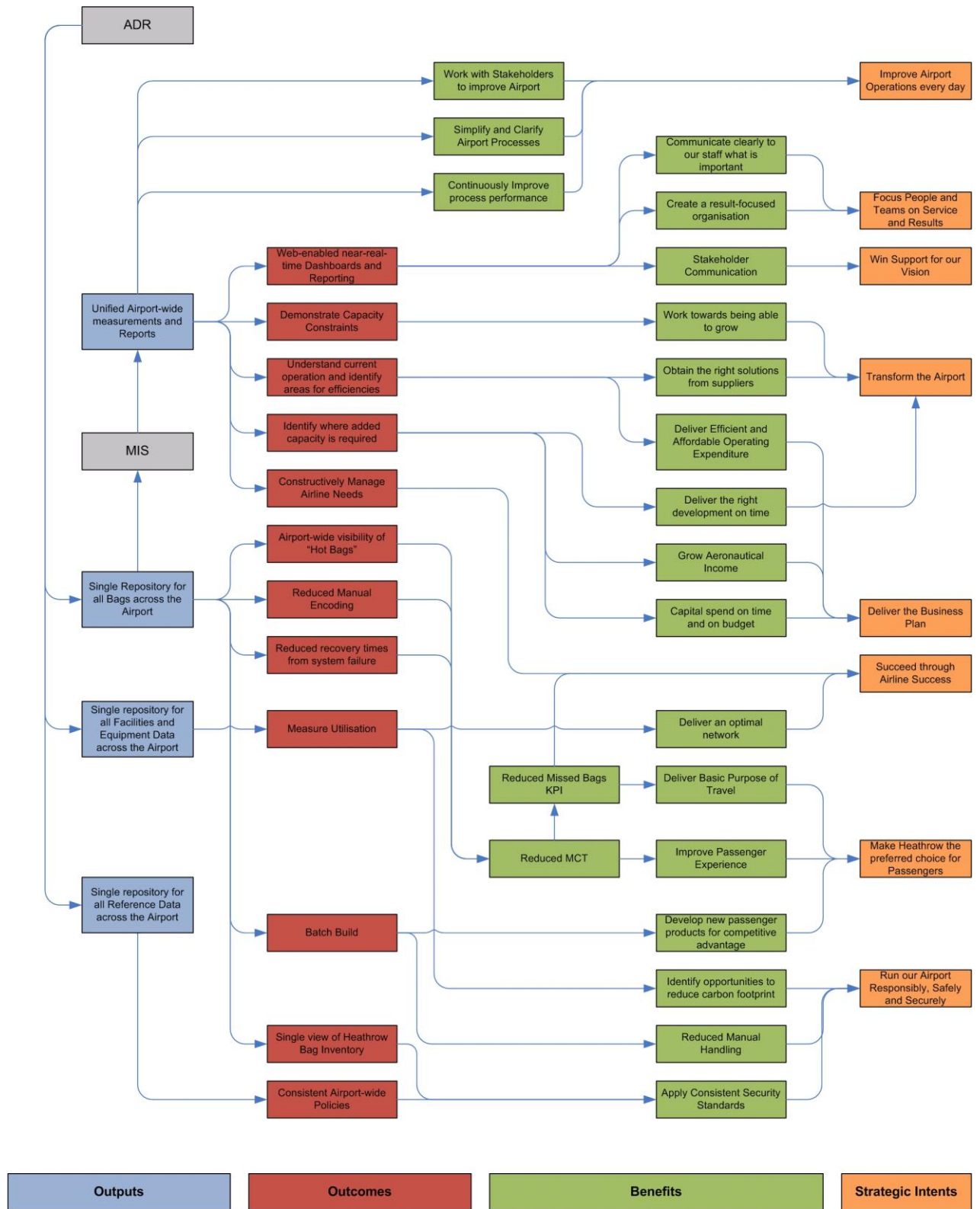


Figure 5: HIBS Benefits Map (Just ADR & MIS)



Annex B: Project Delivery: Cost Information:

Project Information

Project Name: IT Baggage Phase 1
BCT No.: 9992

Cost Information

All information extracted from Mar 2012 month end process

Base Costs:	£7,152,367	83	%
On-Cost:	£989,659	12	%
Opportunity	£24,408	0.3	%
Risk (R1 Allowance Only)	£405,500	5	%
Total	£8,571,934	100	%

Commentary:

Funding from IT CIP was provided to initiate the first tranche of IT Baggage, additional funds were requested June 2012 and October 2012 to ensure the next tranches could be conducted. This involved Design, Build and Test of ADR & MIS Releases 2 & 3.

The Programme is being funded by multiple Development CIP budgets to ensure the solution meets the Airport-wide requirements and is present across the Airport. The various Development Programmes across the Airport have allocated funds to integrate to the IT Baggage solution.

Cost Benchmark Comparisons:	
Project Name:	Heathrow Integrated Baggage System (HIBS)
Total Capital Budget (<i>Constant Prices</i>):	£8,571,934
Guidance Notes:	
None.	
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>	

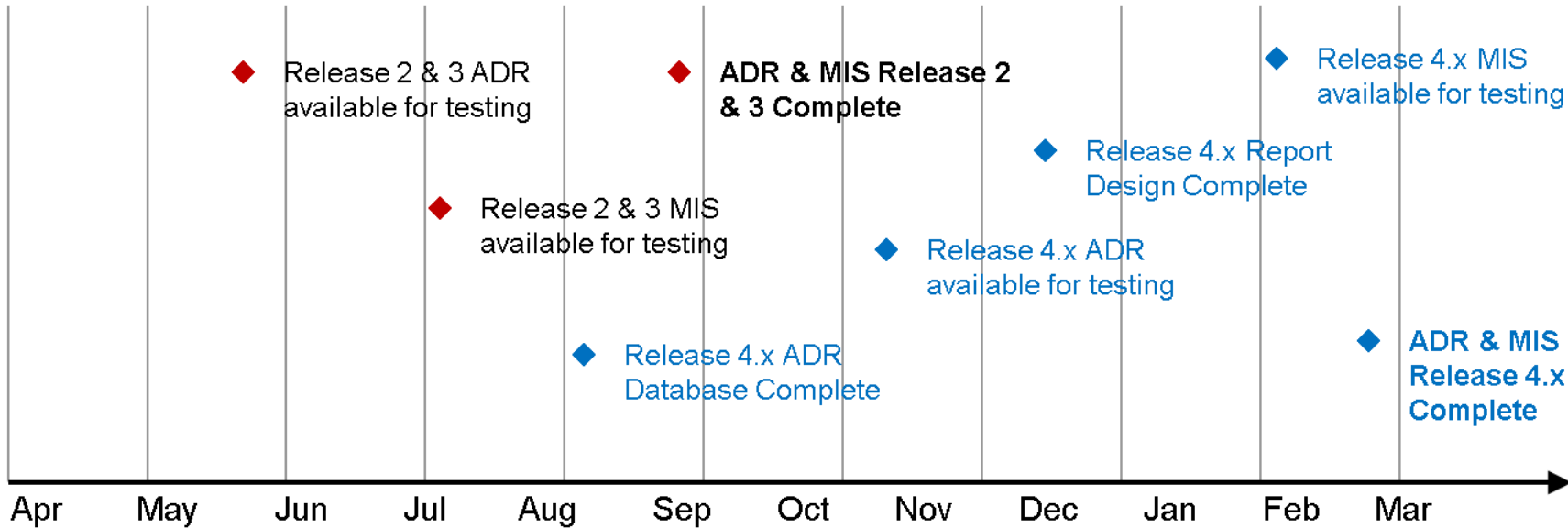
Annex C: Project Delivery: High Level Project Plan:

◆ 30/10/2012
HIBS 2.1 Services
Ready for Testing

◆ 05/02/2013
HIBS 3.0 Services
Ready for Testing

◆ HIBS 4.0 Services
Ready for Testing

◆ HIBS 4.1 Services
Ready for Testing



◆ Instructed

◆ Planned

Header Information

BCT No.	10658
Op No.	30089
Project Name:	T5 Western Baggage Upgrade

Project Overview, Objectives and Status

Overview:	
Description:	<p>The current T5 Baggage Handling System (T5 BHS) IT service comprises over 140 servers and multiple application and middleware components. Together, these form a critical service, vital for automated baggage handling.</p> <p>The current Baggage service has some inherent issues that need to be addressed to maximise the value that it brings to the Heathrow baggage product and to align the IT baggage solution in T5 with the other western campus baggage solutions (i.e. the T3-T5 tunnel and T3IB).</p>
Ref. Drawings / Images:	N/A
Objectives:	
HAL:	<ul style="list-style-type: none">• Upgrade current IT infrastructure to align with latest standards.• Reduce the amount of hardware used within T5 whilst increasing resilience.• Upgrade current software solution to align with the Western Campus strategy (single product)
Airline:	<ul style="list-style-type: none">• Replace the inherent Baggage Reconciliation System associated with the Baggage product.

Project Benefits:

- Reduction in IT infrastructure complexity
- Increased IT failure resilience - quicker recovery times
- Support implementation of Heathrow Integrated Baggage Strategy in T5, realising benefits early
- Potential Opex savings due to earlier switch off of legacy IT systems

Status:

Programme:	Project Gateway Stage:
Western Baggage Product	Implement

Airline Engagement:

Oct 11 CIPWG agreed to add to Q5 CIP
May 12 Funding agreed by CIP Working Group
May 12 Consultation via Baggage System Stakeholder Board
Oct 12 G4 Gateway consultation via Baggage System stakeholder board.

Project Delivery

Current Control Budget:

Total Capital Budget (<i>Estimated At Completion</i>):		£17,349,268	
<i>Refer to Annex B for cost information detail.</i>			
Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
May 2012	March 2013	January 2014	January 2014
Assumptions:			
The following points cover the significant delivery assumptions related to this project:			
Key assumptions for this project are:			
<ul style="list-style-type: none"> • The AOC Baggage Reconciliation System will be selected and implemented in T5 before T5 WBU Phase 4 to enable integration to take place with this • The upgraded solution will interface to relevant Heathrow Integrated Baggage Solution (Baseline 4) • The requirements are based on the existing T3IB requirements 			
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>			

Operational Issues

HAL Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
HAL IT	TBC	The OPEX impact of the project has yet to be confirmed. However OPEX costs are expected to reduce as the BHS and supporting IT infrastructure will both be simplified during the project
Assumptions:		
The following points cover the significant HAL financial revenue and operational cost assumptions related to this project:		
<ul style="list-style-type: none"> • T5 WBU can be frozen during the development phase so that change management and rework / regression are minimised. 		

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
TBC	TBC	TBC
Assumptions:		
The following points cover the significant airline financial revenue and operational cost assumptions related to this project:		
None.		

Average Asset life:	
Average Asset Life:	5 – 7 Years
Commentary:	
It is anticipated that once completed there will be no further upgrades until the existing hardware / software is approaching end of life / end of support.	

<i>Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.</i>	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	TBC
Commentary:	
None	
<i>Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only (see Section 5.3 for further details)</i>	

Non Construction Risk:		
Description	Likelihood	Mitigation
Risk that the T5WBU application/software is currently unproven at the scale, breadth and combination proposed for T5.	Medium	ITF testing is to be a level comparable with action Terminal situation/scale.
Four unscoped items previously excluded from the Project, Cost Plan and VI contract are to be delivered as part of the projects current funding. This represents a significant unknown cost and schedule threat.	Medium	Gap analysis on these four exclusions is underway

Annex B: Project Delivery: Cost Information:

Project Information

Project Name: T5 Western Baggage Upgrade
BCT No.: 10658

Cost Information

All information extracted from March 2013 month end

Base Costs:	12,506,512	72.09%
On-Cost:	3,481,914	20.07%
Opportunity	-140,294	-0.80%
Risk	1,425,366	8.22%
Inflation	75,770	0.44%
Total	£17,349,268	100%

Cost Benchmark Comparisons:	
Project Name:	T5 Western Baggage Upgrade
Total Capital Budget (<i>Nominal Prices</i>):	£17,349,268
Guidance Notes:	
See below.	
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>	

Benchmarking

The table below indicates a breakdown of the Benchmarked elemental analysis, 80.55% of EAC.

Element	Benchmarked £	Unable to Benchmark £	Benchmarked % of EAC	Total	% of EAC
Specialist Electrical	3,046,208	-	17.56%	3,046,208	17.56%
Baggage Systems	5,604,781	3,036,180	32.31%	8,640,961	49.81%
BAA Base Costs	171,000	-	0.99%	171,000	0.99%
Construction Base Total	8,821,989	3,036,180	50.85%	11,858,168	68.35%
Project Specifics	403,362	-	2.32%	403,362	2.32%
On Costs	2,695,351	338,908	15.54%	3,034,259	17.49%
Risks & Opportunities	1,584,210	-	9.13%	1,584,210	9.13%
Inflation	469,264	-	2.70%	469,264	2.70%
TOTAL PROJECT COST (EAC)	13,974,175	3,375,088	80.55%	17,349,263	100.00%

Header Information

BCT No.	10662
Op No.	30090
Project Name:	T5 Early Capacity Increase

Project Overview, Objectives and Status

Overview:	
Description:	The current T5 EBS has a usable capacity of approximately 3,800 positions and is used to store early transfer bags, early premium direct bags and bags disrupted due to operational / external events. The project will increase the capacity of the T5 EBS in order to support the implementation of various operational and service enhancements.
Ref. Drawings / Images:	N/A
Objectives:	
HAL:	<ul style="list-style-type: none">• Increase capacity of T5 early bag store as enabler for capacity growth and operational improvements currently not possible within constraints of existing capacity.• Realisation of benefits associated with early check-in, balanced, compressed and batch build.• Improved recovery from disruption events.
Airline:	<ul style="list-style-type: none">• As above.

Project Benefits:
<ul style="list-style-type: none">• Reductions in handler Opex.• Enabler for processing and capacity improvements (e.g. early check-in).• Enabler for compressed build / batch build operating methodology.• Enabler for more flexible use of assets (potential capacity sharing).• Improvement management of disruption events.

Status:	
Programme:	Project Gateway Stage:
Western Baggage Product	Options

Airline Engagement:
Oct 11 CIP Working Group agreed to add to Q5 CIP. Informal presentation of developing options March 2013 with Terminal 5 airline.

Project Delivery

Current Control Budget:			
Total Capital Budget (<i>Estimated At Completion</i>):			£14,717,174
<i>Refer to Annex B for cost information detail.</i>			
Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
G1 – Sep '12	TBC	TBC	TBC

Assumptions:
The following points cover the significant delivery assumptions related to this project:
Emerging options: <ul style="list-style-type: none"> • Modify existing bag store rack heights to generate more capacity. • Use of 'cathedral' space for additional capacity (connections into exiting bag store required). • Expand existing bag store racking. • Additional crane based storage at Level 10 in T5A N and S. • Combinations of the above options.
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>

Operational Issues

HAL Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
TBC	TBC	TBC
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
<ul style="list-style-type: none"> • Benefit Realisation of service level / process change initiatives will be constrained by current EBS capacity. • Without enhancement, incremental changes will reduce operational headroom; increase the number of days where demand exceeds operational capacity and impact on ability to recover from disruption. 		

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
TBC	TBC	TBC
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
None.		

Average Asset life:	
Average Asset Life:	TBC
Commentary:	
Baggage Systems 15 years	
IT 7 years	
M&E 15 years	
Building 25 years	
Note asset life cycle will be dependent on option selected at G2 April 2013.	
<i>Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.</i>	
Impact on User Charges:	

Estimated Per Passenger Cost Impact:	TBC
Commentary:	
None.	
<i>Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only (see Section 5.3 for further details)</i>	

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project.
There is a risk that the airlines in T5 may decide not to progress with compressed build after this project completes.

Annex B: Project Delivery: Cost Information:

Project Information

Project Name: T5 Early Capacity Increase
 BCT No.: 10662

Cost Information

All information extracted from March 2013 month end

Base Costs:	10,964,907	75%
On-Cost:	2,573,528	17%
Opportunity		0%
Risk	1,178,739	8%
Total	£14,717,174	100%

Cost Benchmark Comparisons:	
Project Name:	T5 Early Bag Store Expansion
Total Capital Budget (<i>Nominal Prices</i>):	£15,000,000
Guidance Notes:	
None.	
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>	

Header Information

BCT No.	10545
Op No.	25857
Project Name:	T4 APV HBS Replacement

Project Overview, Objectives and Status

Overview:	
Description:	The current T4 APV contingency facility is required to support the T4 operation but replacement of existing Standard 1 HBS is not considered necessary and requires removal only. There is further an opportunity to install a Standard 3 HBS test loop with live bag feed in APV. This gives the ability to test with live bags, swap HBS machines, change test layouts and utilise existing Standard 2 test loop equipment located in APV.
Ref. Drawings / Images:	See Annex A.
Objectives:	
HAL:	<ul style="list-style-type: none">• Provide contingency facility that will enable bags to be sent on alternative route from Zone G check-in for onward screening and make up.• Improved recovery from disruption events.• Provide Standard 3 HBS test facility to allow testing with test and live bags with alternative HBS machines.
Airline:	<ul style="list-style-type: none">• As above.

Project Benefits:

<ul style="list-style-type: none">• Indirectly contributes to reducing baggage misconnect rates by providing contingency facility.• Improvement management of disruption events.• Enables Standard 3 HBS machine testing of a range of suppliers with test and live bags, thus providing more intelligence for the Heathrow wide Standard 3 HBS replacement programme to be completed by 2020.
--

Status:

Programme:	Project Gateway Stage:
Western Baggage Product	Definition (G4)

Airline Engagement:

<p>Feb 12 CIPWG agreed to include the Standard 3 HBS Test Loop</p> <p>T4 Baggage Stakeholders consulted on 06/03/2013 for G3 Gateway request and their endorsement obtained. (agreement recorded in email from T4 AOC Chair Allan Lambert)</p> <p>Baggage Stakeholder Board agreement obtained on 8 March 2013 for G3 Gateway. (Recorded in minutes)</p> <p>T4 Baggage Programme Board consulted on 25 March 2013 (recorded in minutes)</p>

Project Delivery

Current Control Budget			
Total Capital Budget (<i>Estimated At Completion</i>):		£4,150,000.00	
<i>Refer to Annex B for cost information detail.</i>			
Schedule:			
Option Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
May 2012	April 2013	October 2013	October 2013
Assumptions:			
The following points cover the significant delivery assumptions related to this project:			
Emerging option;			
<ul style="list-style-type: none"> Remove obsolete Standard 1 HBS and provide contingency for bags from check-in, for onward screening and build. Alter current Standard 2 HBS test loop to allow testing of a range of Standard 3 HBS machines with test and live bags. 			
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>			

Operational Issues

HAL Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Nil	Nil	Contingency facility operated only when needed in contingency mode. Test Facility operation will be capitalised.
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
<ul style="list-style-type: none"> Agreement to test live bags as part of the Standard HBS test programme. Installation works during normal hours of operation. 		

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Nil	Nil	Contingency facility operated only when needed. Test Facility operation will be capitalised.
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
Agreement to test live bags as part of HBS test programme.		

Average Asset life:	
Average Asset Life:	Contingency Facility 15 years
Commentary:	
HBS Standard 3 Test Facility anticipated life c. 3-5yrs.	

Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.

Impact on User Charges:

Estimated Per Passenger Cost Impact:	None.
--------------------------------------	-------

Commentary:

Options stage financial appraisal carried out.

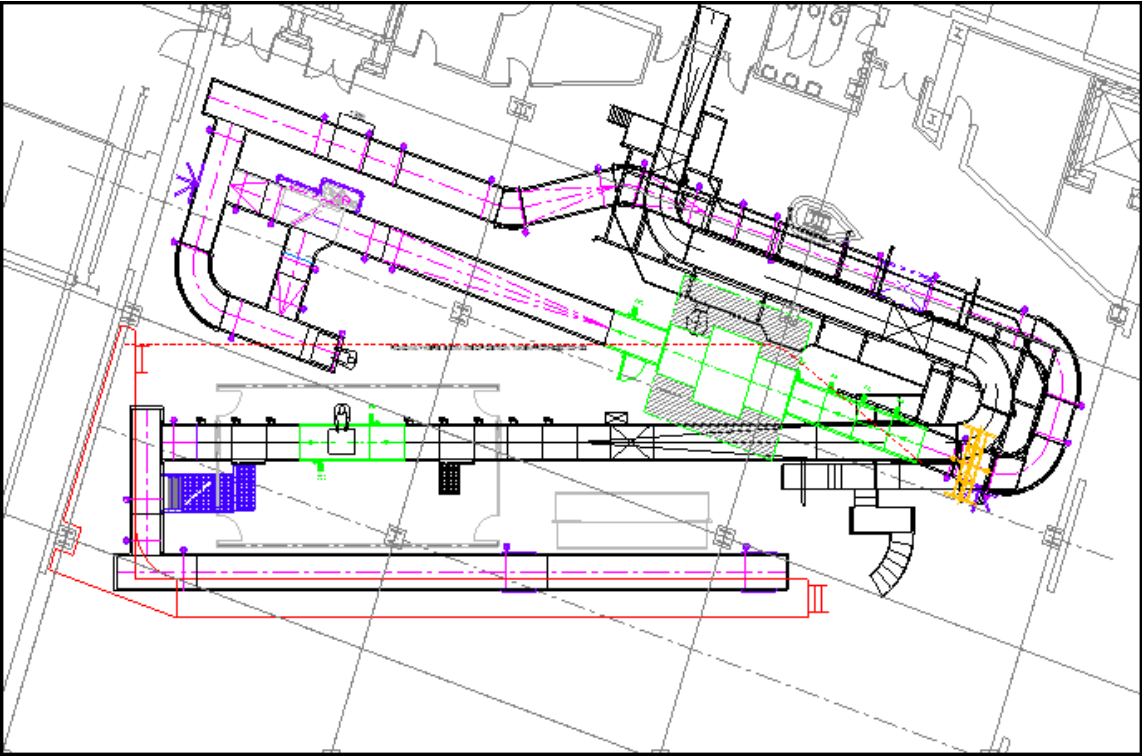
Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only (see Section 5.3 for further details)

Non Construction Risk:

The following points cover any significant areas of risk for the Airline Community regarding this project.

None.

Annex A: Overview: T4 APV Contingency and Standard 3 HBS Test Facility layout



Annex B: Project Delivery: Cost Information:

Project Information

Project Name: T4 APV HBS Replacement
BCT No.: 10545

Cost Information

All information extracted from March 2013 month end

Base Costs:	3,055,990	74%
On-Cost:	796,400	19%
Opportunity		0%
Risk	297,610	7%
Total	<u>£4,150,000</u>	100%

Cost Benchmark Comparisons:	
Project Name:	T4 APV HBS Replacement
Total Capital Budget (<i>Nominal Prices</i>):	£4,150,000.00
Guidance Notes:	
The costs and the schedule are both supported by a competitive tender exercise, which has reduced the base costs by £400,000. The scope includes the installation of the first HBS machine which will be supplied free of charge to HAL.	
Project on-costs have been established using benchmarked percentage allowances against the services to be provided for this project. Baggage projects typically have a higher than average On Cost percentage due to the requirements for Baggage Operation Assurance (BOA) and Baggage Commissioning. The 19% against the EAC is higher than the typical 15 to 18% range due to concept guardianship, and the improvement in the Base Costs from the tender.	
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>	


Appendix C: Terminal Restoration and Modernisation

10829	TATPJ Intellectual Project
10664	Proof of Concept Self Bag Drop
9105	New Model Line (formerly ATRS)
10666	Wayfinding Strategy Initiative
10711	T3 Refurbishment Programme
10653	PRM Lifts
10554	T3 South Wing HVAC Replacement
10652	T3 CIP Lounge Remedial Works
9644	T4 Departures Phase 2
9844	T4 Airbridge Replacement
9575	T5 CSA and Connections Capacity
10826	Asset Replacement
10232	2011-2012 Minor Projects
10295	Retail Concessions
10296	Retail Services
10692	Fast Track Upgrade

Header Information

BCT No.	10829
Op No.	
Project Name:	TATPJ Intellectual Project (Self Boarding)

Project Overview, Objectives and Status

Overview:	
Description:	Procurement of an airport wide Self Boarding solution and deployment in the current quinquennium.
Ref. Drawings / Images: <i>(Also Refer to Annex A)</i>	
Objectives:	
HAL:	Ensure a competitive total cost of operation. Improve passenger experience.
Airline:	Support reductions in airline operating costs through reduced resource within the check-in process. Speed up the boarding process, particularly for quick aircraft turn-around. Align with industry best practice such as IATA Fast Travel.

Project Benefits:

Ensure a competitive total cost of operation:
Modelling by HAL shows that depending on the level of investment and uptake, potential annual savings for the airline community are estimated at between £2.5m (T2 and T5) and £4.8m (all terminals).
Improved passenger experience:
Free airline staff to add value to those passengers who require assistance at the boarding gate.

Status:

Programme:	Project Gateway Stage:
Passenger Experience	G0/G1 – Initiate

Airline Engagement:

Widespread airline engagement through the Self Boarding Airline Working group, and formal consultation through the Infrastructure Stakeholder Programme Board, CIP Working Group, and Q6 forums including the Q6 Portfolio Stakeholder Board and the CSW.
There is comprehensive airline representation on the supplier selection process.

Project Delivery

Current Control Budget:			
Total Capital Budget (<i>Estimated At Completion</i>):		£3,300,000	
<i>Refer to Annex B for cost information detail.</i>			
Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
Q1 / 2013	Jan 2014	Feb 2014	March 2014
<i>Refer to Annex C for programme information detail.</i>			
Assumptions:			
The following points cover the significant delivery assumptions related to this project:			
The trials were completed within Q5. The remaining milestones for Q5+1 and into Q6 are as follows:			
Capture Requirements		March 2013	
Issue RFP		April 2013	
Selection process		June/July 2013	
Vendor selected		July 2013	
Solution Development		August 2013	
Go Live		March 2014	
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>			

Operational Issues

HAL Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Additional Maintenance Costs	-£1k annum / per Self Boarding gate	Assumption based on costs from trial supplier – actual cost will depend on supplier procured for LHR.
Assumptions:		
The following points cover the significant operational assumptions related to this project;		
Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Reduction in Opex.	Depending on savings it is estimated to be between + £2.5m (T2	Greatest savings will be for long haul flights.

	and T5) and + £4.8m (all terminals)	
Assumptions:		
The following points cover the significant operational assumptions related to this project;		
Solution will be for 'common use' 'Hosts' for the units will be provided by the airlines		

Average Asset life:	
Average Asset Life:	5 Years
Commentary:	
None.	
<i>Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.</i>	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	None.
Commentary:	
None.	
<i>Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only.</i>	

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project.
AAA biometric solution development will be developed ahead of the industry standard being defined by IATA.
Airline IR challenges may prevent full benefits realisation.

Annex A: Overview: Reference Drawing / Image:

Terminal 5 – Artist’s impression of self-boarding gates



Terminal 2B – Drawings showing potential layout for a typical boarding gate



Annex B: Project Delivery: Cost Information:

Project Information

Project Name: TATPJ Intellectual Project
BCT No.: 10829

Cost Information

All information extracted from March 2013 month end process

Base Costs:	£1,980,000	60	%
On-Cost:	£660,000	20	%
Opportunity	£165,000	5	%
Risk (R1 Allowance Only)	£495,000	15	%
Total	£3,300,000	100	%

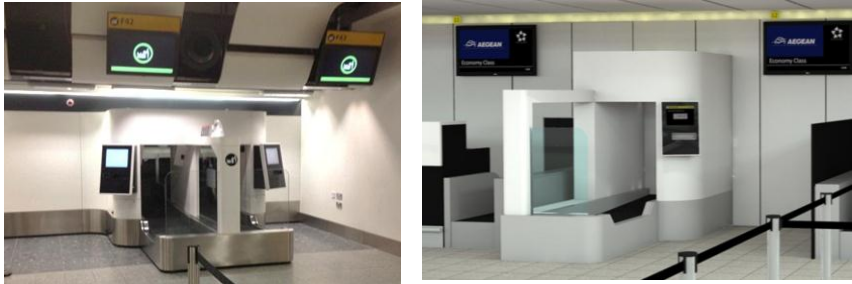
Commentary:

Cost Benchmark Comparisons:	
Project Name:	TATPJ Intellectual Project
Total Capital Budget (<i>Constant Prices</i>):	£3,300,000
Guidance Notes:	
Benchmark against performance report from the trials.	
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>	

Header Information

BCT No.	10664
Op No.	
Project Name:	Proof of Concept Self Bag Drop

Project Overview, Objectives and Status

Overview:	
Description:	Trials of Self Bag Drop within the Heathrow environment, in T1 and T3. Procurement of an airport wide solution and deployment in the current quinquennium. Initial deployment of 12 units in T5 check-in wave 2.
Ref. Drawings / Images: <i>(Also Refer to Annex A)</i>	
Objectives:	
HAL:	Ensure a competitive total cost of operation. Improve resilience and sufficient hub capacity. Improve passenger experience.
Airline:	Support reductions in airline operating costs through reduced resource within the check-in process. Enable airline resource to be redistributed to focus on passengers requiring additional assistance. Align with industry best practice such as IATA Fast Travel.

Project Benefits:

Ensure a competitive total cost of operation.
Modelling by HAL based on one host to four self-bag drop units shows potential annual savings for the airline community would be:
£2.3m at 10% of LHR passengers
£5.8m at 25% of LHR passengers
£11.6m at 50% of LHR passengers
Improved resilience and sufficient hub capacity.
Trial data shows that self-bag drop is currently 20% faster than traditional check-in desks.
Process improvements identified will improve this to be 50% faster.
Ultimately, self-bag drop could remove the need to extend terminal buildings and allow for capacity demand to be delivered within the current terminal footprint.

Status:	
Programme:	Project Gateway Stage:
Passenger Experience	G0/G1 – Initiate

Airline Engagement:

Widespread airline engagement through the Self Bag Drop Airline Working Group, and formal consultation through the Infrastructure Stakeholder Programme Board, CIP Working Group. There is comprehensive airline representation on the supplier selection process.

Project Delivery

Current Control Budget:			
Total Capital Budget (<i>Estimated At Completion</i>):		£13,462,789	
<i>Refer to Annex B for cost information detail.</i>			
Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
Q1 / 2013	Feb 2014	April 2014	May 2014
<i>Refer to Annex C for programme information detail.</i>			
Assumptions:			
The following points cover the significant delivery assumptions related to this project:			
The trials were completed within Q5. The remaining milestones are as follows:			
Capture Requirements		April 13	
Issue RFP		June 13	
Selection process		July / Aug 13	
Vendor selected		August 13	
Solution Development		September 13	
Go Live		May 2014	
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>			

Operational Issues

HAL Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Additional Maintenance Costs	-£3k annum/per Self Service Bag Drop (SSBD) unit	Due to additional equipment required, above the normal baggage system. Assumption based on costs from trial supplier – actual cost will depend on supplier procured for LHR.
Assumptions:		
The following points cover the significant operational assumptions related to this project;		
Reduction in the number of traditional check-in desks required		
Reduction in landside congestion and queues		

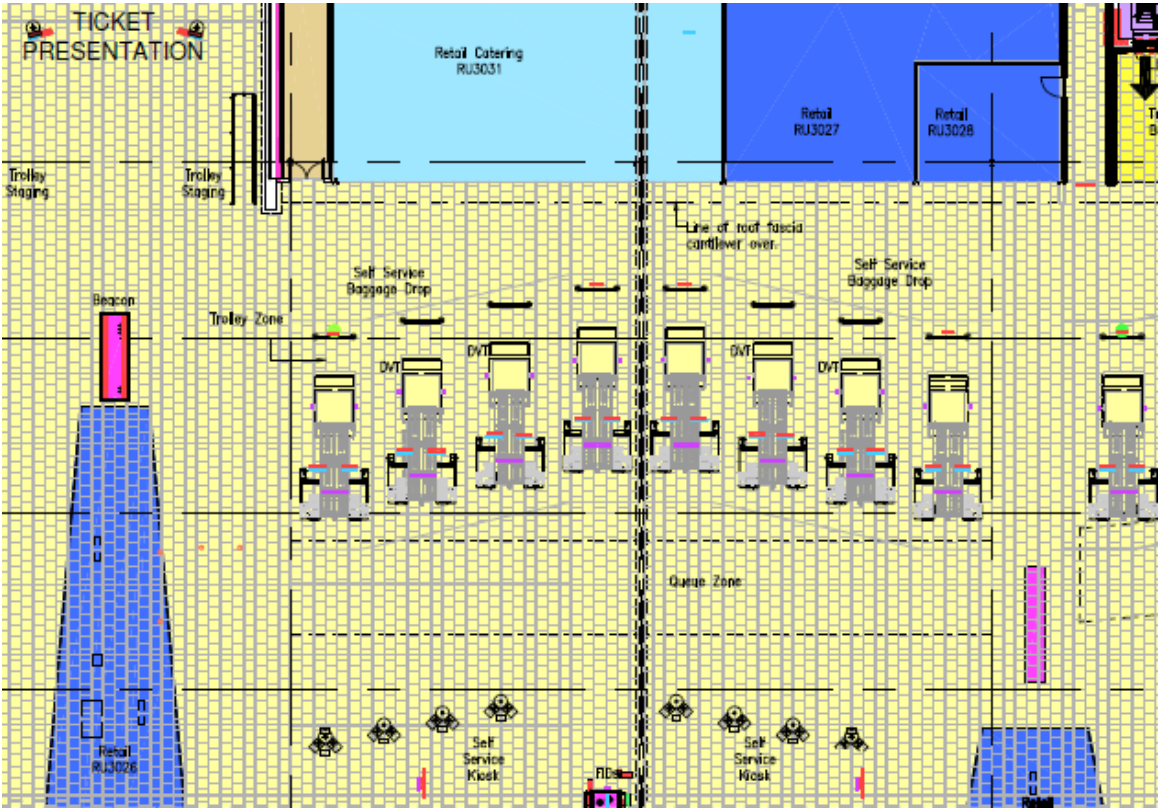
Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Reduction in Opex.	Depending on savings it is estimated to be between + £2.3 - £11.6m	SSBD requires one host to four self-bag drop units.
Reduction in OPEX and check-in charges	TBC	SSBD with process improvements could be up to 50% faster than a traditional check-in desk. Therefore can replace up to two traditional check-in desks with one self-bag drop.
Assumptions:		
The following points cover the significant operational assumptions related to this project;		
Solution will be for 'common use'		
'Hosts' for the units will be provided by the airlines		

Average Asset life:	
Average Asset Life:	5 Years.
Commentary:	
None.	
<i>Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.</i>	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	None.
Commentary:	
None.	
<i>Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only.</i>	

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project.
AAA biometric solution development will be developed ahead of the industry standard being defined by IATA.
Airline IR challenges may prevent full benefits realisation.

Annex A: Overview: Reference Drawing / Image:

Terminal 5A – Zone C



Existing Manned Bag Drop Desks. One pair to be removed (location tbc) and replaced with a pair of self-service bag drop units

Annex B: Project Delivery: Cost Information:

Project Information

Project Name: Proof of Concept Self Bag Drop
BCT No.: 10664

Cost Information

All information extracted from March 2013 month end process

Base Costs:	£8,077,673	60	%
On-Cost:	£2,692,558	20	%
Opportunity	£673,139	5	%
Risk (R1 Allowance Only)	£2,019,418	15	%
Total	£13,462,789	100	%

Commentary:

Cost Benchmark Comparisons:	
Project Name:	Proof of Concept Self Bag Drop
Total Capital Budget (<i>Constant Prices</i>):	£13,462,789
Guidance Notes:	
Benchmark against performance report from the trials.	
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>	

Header Information

BCT No.	9105
Op No.	24230
Project Name:	New Model Line (Formerly ATRS)

Project Overview, Objectives and Status

Overview:	
Description:	<p>Following a review of the outcomes arising from the Next Generation Auto-Tray Return System (ATRS) prototype by the Security Governance Group, a view has been formed that to be able to deliver the required business benefits, security development work moving forward must take a more holistic view focusing not solely on the cabin baggage element of the security search process. The Security Programme was created to deliver successful change and realise efficiencies in the passenger security screening function. New Model Line (NML) project is required to deliver the technology and infrastructure solutions essential to realising the objectives and benefits of the Security Programme.</p> <p>The NML project has a number of sub-workstreams:</p> <ul style="list-style-type: none">* Shared AMD (complete)* Automated Ticket Presentation (International and Domestic)* Enhanced Lanes
Ref. Drawings / Images: <i>(Refer to Annex A)</i>	None
Objectives:	
Heathrow:	<p>The Security Programme is focused on the following 3 objectives:</p> <ul style="list-style-type: none">* Improve passenger perception of security to deliver higher ASQ scores.* Improve operational efficiency to deliver annualised OPEX savings.* Improve working environment for staff through improved engagement and TU support.
Airline:	N/A

Project Benefits:

Increased EBITDA (Opex saving)
Increased ASQ score (security wait time)

Status:

Programme:	Project Gateway Stage:
TRM	Brief Decision Gateway was obtained in February 2011.

	Gateway status for each workstream: * Shared AMD. [G6] * Automated Ticket Presentation [G4] * Enhanced Lanes [G4]
--	--

Airline Engagement:

Strategic Security Programme has been briefed at the PRB and CIP Working Group. The project has been presented on a workstream basis at the relevant Stakeholder Programme Board (Infrastructure, and individual terminals 5, 4, and 3).

Project Delivery

Current Control Budget:

Total Capital Budget (*Estimated At Completion*): £29,904,795

Refer to Annex B for cost information detail.

Schedule:

Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
02/2011	March 2012	December 2013	June 2012 (phased)

Refer to Annex C for programme information detail.

Assumptions:

The following points cover the significant delivery assumptions related to this project;

EAC includes scope approved for all NML workstreams.

Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.

Operational Issues

HAL Financial Revenue and Operational Cost (Opex) Impact:

Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Security Opex	£11m (circa)	Opex is calculated on a workstream basis and will be assessed once the project completes. Initial indications from early phases are good (circa £3m in 2012) and will increase as more facilities are completed during 2013.

Airline Financial Revenue and Operational Cost (Opex) Impact:

Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
NIL	NIL	

Average Asset life:

Average Asset Life: 10 years (Equipment based on Heathrow standard)

Commentary:

Assets typically involve security screening and tray return systems. Minor changes to existing layouts and internal infrastructure may also be required.

Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.

Impact on User Charges:

Estimated Per Passenger Cost Impact: 14.7p

Commentary:

Expected reduction in user charges during Q6, due to Opex savings generated by this project.

Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only.

Non Construction Risk:

The following points cover any significant areas of risk for the Airline Community regarding this project.

None.

Annex B: Project Delivery: Cost Information:

Project Information

Project Name: New Model Line (formerly ATRS)
 BCT No.: 9105

Cost Information

All information based on March 2013 month end process.

Base Costs:	£23.90	80	%
On-Cost:	£3.57	12	%
Opportunity	£0	0	%
Risk	£2.43	8	%
Total	£29.90	100	%

Cost Benchmark Comparisons:

Project Name:	New Model Line (Formerly ATRS)
Total Capital Budget (<i>Constant Prices</i>):	£30,760,061

Guidance Notes:

Benchmarking has been completed on a workstream basis. High level benchmarking analysis has been derived from a range of sources including: actual cost data from comparable projects; benchmarked rates; supplier costs and prices obtained from Heathrow internal sources and appointed contractors. In addition a competitive OJEU tender was held for the Enhanced Lanes equipment, giving clear comparisons between supplier capabilities and costs.

Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.

Header Information

BCT No.	10666
Op No.	30066
Project Name:	Wayfinding Strategic Initiative

Project Overview, Objectives and Status

Overview:	
Description:	<p>This project is a key part of a HAL Executive sponsored strategic initiative to improve the ease of movement through the airport. Wayfinding is considered to be the second most important factor in driving overall passenger satisfaction ASQ scores, and following the successful delivery of T1 wayfinding improvements, further funding was identified to extend the work across other Terminals. The Wayfinding Strategic Initiative project was incepted in December 2011 to undertake this further work.</p> <p>There are 15 workstreams which are included in the project, and these were divided into 2 key phases:</p> <p>Phase 1 – pre-Olympics workstreams Phase 2 – post-Olympics workstreams</p> <p>The acquisition is a Design & Build Contract, and Task Orders for each phase were awarded under the LPI ViP Framework to Mansell. Two early works were evaluated as best delivered directly with an LPI local contractor, as there was limited design development required, and these were completed prior to commencement of the main works.</p>
Ref. Drawings / Images: <i>(Refer to Annex A)</i>	None.
Objectives:	
HAL:	<p>Improve the passenger and user experience at Heathrow - measured through increased QSM and ASQ scores.</p> <p>Design and deliver high quality, consistent and intuitive solutions which are in accordance with Heathrow’s Design Standards and best practice.</p>
Airline:	Ease passenger movements through the Terminal processes supporting Airline performance targets.

Project Benefits:	
<p>The project benefits have been identified against Terminal QSM indices and are detailed in the Benefits Realisation Plan. QSM measures were reviewed by each individual terminal and the baseline performance scores were agreed (Dec 2011 for Phase 1 and Dec 2012 for Phase 2). Improvement targets have been set for each terminal to enable performance to be monitored as the project progresses.</p>	

Status:	
Programme:	Project Gateway Stage:
Passenger Experience (TR&M)	Phase 1 - Completed (Gateway 6 - May 2012)
	Phase 2 - Implementation (Gateway 4 - October 2012)

Airline Engagement:
Airlines have been consulted through the Service Quality and Passenger Facilitation Working Groups, and also the local Terminal AOCA and Stakeholder Programme Board meetings.

Project Delivery

Current Control Budget:			
Total Capital Budget (<i>Estimated At Completion</i>):		£10,084,191	
<i>Refer to Annex B for cost information detail.</i>			
Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
11/2011	Phase 1 - 05/2012 Phase 2 - 02/2013	Phase 1 - 07/2012 Phase 2 - 07/2013	Phase 1 - from 05/2012 Phase 2 - from 04/2013
<i>Refer to Annex C for programme information detail.</i>			
Assumptions:			
The following points cover the significant delivery assumptions related to this project:			
Project split into 2 phases: Phase 1 pre Olympics and Phase 2 post Olympics. Majority of works undertaken at night and in agreement with the Terminal Operations Team.			
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>			

Operational Issues

HAL Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Opex	-£50,000	The project is expected to have a positive benefit in maintenance and updating of signage through dynamic screens in lieu of static signs.
Additional Retail Income	+£300,000	New media screens on baggage belts in T1, T3 & T4 are expected to generate additional revenue of £300k pa.
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
None.		

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
		None.
Assumptions:		
The following points cover the significant operational assumptions related to this project;		
None.		

Average Asset life:	
Average Asset Life:	5 Years
Commentary:	
This is based on the life of a standard FIDS screen.	
<i>Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.</i>	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	1.1p
Commentary:	
None.	
<i>Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only.</i>	

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project.
New signage and removal of existing will be sequenced to avoid any passenger confusion, and temporary signage will be provided where required.

Annex B: Project Delivery: Cost Information:

Project Information

Project Name: Wayfinding Strategic Initiative
BCT No.: 10666

Cost Information

All information extracted from March 2013 month end process

Base Costs:	£8,733,823	87	%
On-Cost:	£1,253,429	12	%
Opportunity:	(£204,811)	(2)	%
Risk (R1 Allowance Only):	£301,750	3	%
Total:	£10,084,191	100	%

Commentary:

Cost Benchmark Comparisons:	
Project Name:	Wayfinding
Total Capital Budget (<i>Constant Prices</i>):	£12,000,000
Guidance Notes:	
None.	
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>	

Header Information

BCT No.	10711
Op No.	30165
Project Name:	T3 Refurbishment Project

Project Overview, Objectives and Status

Overview:	
Description:	Refurbishing key passenger areas within Terminal 3 and to provide an additional passenger transfer solution from Terminal 3 to Terminal 5.
Ref. Drawings / Images: <i>(Refer to Annex A)</i>	Illustration highlighting the project demise is attached in Annex A.
Objectives:	
HAL:	To improve passenger experience and maintain / improve existing QSM scores.
Airline:	Improve passenger experience and Pier 5 Gateroom operation.

Project Benefits:	
<p>The Q5 + 1 refurbishment project drivers are to improve the passenger experience within Terminal 3 and to realise benefits which are to;</p> <ul style="list-style-type: none"> •Improve specific Terminal 3 QSM / ASQ scores. •Improve and align the architectural quality of key passenger spaces. •Deliver passenger experience improvements that are independent and do not rely on future major spend. <p>The Q5+1 Pier 5 Transfer gate project drivers are to improve passenger experience and to realise benefits which;</p> <ul style="list-style-type: none"> •Reduce congestion at peak times within the main T3 transfer area. •Reduce transfer time for passengers from Pier 5 to Terminal 5. •Provide a shorter passenger walking distance. 	

Status:	
Programme:	Project Gateway Stage:
Terminal Restoration and Modernisation	Refurbishment Project – Solutions Development Pier 5 Transfer - Options
Airline Engagement:	
Airline engagement takes place on a monthly basis at the T3 Stakeholder Programme Board and with the T3 AOC Chair.	

Project Delivery

Current Control Budget:			
Total Capital Budget <i>(Estimated At Completion)</i> :		£16, 408, 278	
<i>Refer to Annex B for cost information detail.</i>			
Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
14/01/2013	24/07/2013	31/04/2014	Continual use
<i>Refer to Annex C for programme information detail.</i>			

Assumptions:
The following points cover the significant delivery assumptions related to this project;
Passenger areas will be operational throughout the project delivery. Night time working will take place, however there may be an opportunity to work between the hours of 13:00 – 17:00 in the Pier 5 and Pier 7 enclosed gaterooms (to be agreed daily as this is dependent on airfield planning).
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>

Operational Issues

HAL Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
No impact		No increases in operational costs have been identified at this stage for the refurbishment project.
TBC		Should the transfer options progress, the associated operational costs (e.g. additional coaching operation) will be confirmed.

Assumptions:
The following points cover the significant operational assumptions related to this project;
Change of cleaning regime for the flooring within the open plan and Pier 7 gaterooms. Cleaning of additional glass wall linings in the Piers.

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
TBC		No additional costs associated with the refurbishment works and the transfer project will be considered separately.

Assumptions:
The following points cover the significant operational assumptions related to this project;
No significant operational assumptions have been identified.

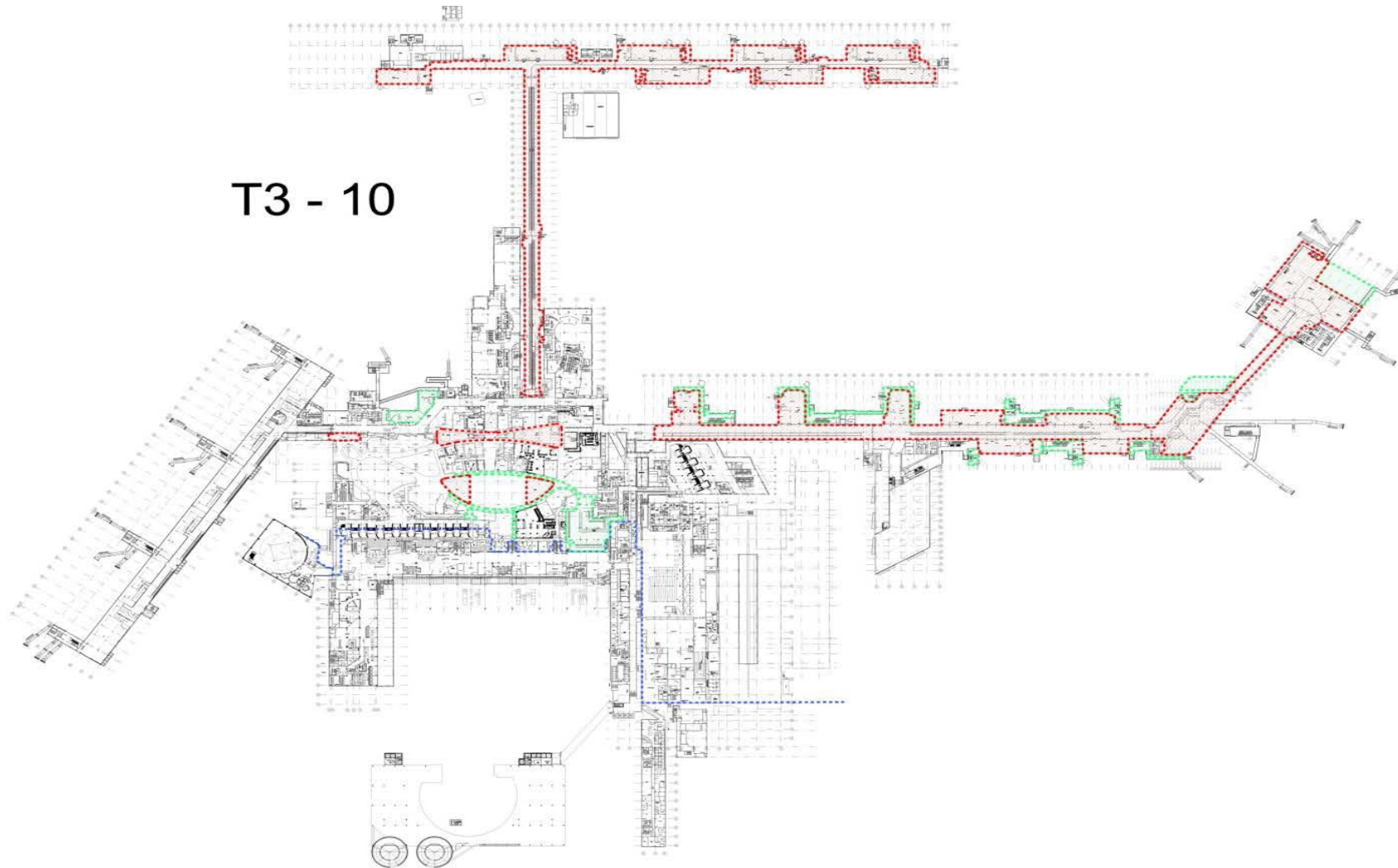
Average Asset life:	
Average Asset Life:	15 Years
Commentary:	
It is assumed that new assets such as flooring, glazing, seating, ceiling and light fittings will be procured to have an asset life for the duration that T3 remains operational.	
<i>Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.</i>	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	Nil

Commentary:
No Passenger cost impact for the refurbishment works. Any cost associated with the transfer project is yet to be considered but it is anticipated there will be no significant passenger cost associated with the project.
<i>Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only.</i>

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project.
There are no impacts on disruption to the airlines.

Annex A: Overview: Reference Drawing / Image:

The areas highlighted in red indicate the extent of the scope of works being considered.



Annex B: Project Delivery: Cost Information:

Project Information

Project Name: T3 Refurbishment Project
BCT No.: 10711

Cost Information

All information extracted from March 2013 month end process

Base Costs:	£11,857,185	72.26	%
On-Cost:	£1,013,187	6.18	%
Project Costs	£1,204,290	7.34	%
Risk (R1 Allowance Only)	£2,333,611	14.22	%
Total	£16,408,273	100	%

Commentary:

Cost Benchmark Comparisons:	
Project Name:	T3 Refurbishment Programme
Total Capital Budget (<i>Constant Prices</i>):	16.4m
Guidance Notes:	
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>	

Header Information

BCT No.	10653
Op No.	30056
Project Name:	PRM & T3 Pier 7 Gateroom Lifts

Project Overview, Objectives and Status

Overview:	
Description:	<p>Under European Law, passengers with reduced mobility (PRM) should be provided with assistance when travelling by air. The DfT Code of Practice for providing this assistance for PRM stipulates that wheelchair users should be able to remain in their own wheelchair to the gate. It is recommended that lifts or ramps should be installed at gates to facilitate the vertical movement of wheelchairs and other mobility equipment. The objective of this project is to install additional lifts in the proximity of the gate areas, primarily for the movement of wheelchair and other mobility equipment to reduce journey time for airport operatives moving mobility equipment from aircraft side to passenger on Arrivals and vice versa for Departures. The agreed scope of works which has been endorsed by the various terminal Stakeholder Programme Board's, Passenger Experience Sponsor Group & CIP Working Group is as follows: T4 – new lifts at Stand 405 and Stand 411 T3 – new lifts at Stand 316 and Stand 320 T5b – Swap out existing hoists for new lifts at Stand 534 and Stand 537. Modifications to 8 No existing hoists at T5b to address H&S issues.</p>
Ref. Drawings / Images: <i>(Refer to Annex A)</i>	None.
Objectives:	
HAL:	<p>The project is focused on the following objectives: Reduce journey times from aircraft side to gate area for repatriation of wheelchairs. Reduction in manual handling for airport staff associated with movement of passenger mobility equipment.</p>
Airline:	N/A
Project Benefits:	
<p>Improved Passenger Experience on Arrivals and Departures journey. Opex reduction for Handlers / Airlines through faster movement of wheelchairs and equipment between the aircraft side and the departure gate. Opex reduction for the Airport PPM provided through the reduced need to use ambilift equipment. Compliance with DfT guidelines for providing assistance to PRM.</p>	

Status:	
Programme:	Project Gateway Stage:

Terminal Restoration & Modernisation (Passenger Experience)	G2 (January 2013)
---	-------------------

Airline Engagement:
The recommended Options were endorsed by the T1, T3, T4, and T5 Stakeholder Programme Boards in December 2012. The project was endorsed from 'I' to 'P' status at the CIP Working Group in January 2013.

Project Delivery

Current Control Budget:	
Total Capital Budget (<i>Estimated At Completion</i>):	EAC: £6,365,000
<i>Refer to Annex B for cost information detail.</i>	

Schedule:			
G1	Start on Site:	Completion on Site:	Operational Use Commences:
09/2012	08/2013	03/2014	03/2014
<i>Refer to Annex C for programme information detail.</i>			

Assumptions:
The following points cover the significant delivery assumptions related to this project;
The project will deliver a wheelchair, mobility equipment, hand baggage acceptance solution – not for the movement of passengers. The scope of the project is confined to airside gate areas and does not include any additional PRM facilities in any other part of the Terminals. That on-going hire of temp hoists from Olympics is managed outside of this project.
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>

Operational Issues

HAL Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Maintenance Opex	(-£65k)	Opex circa £10-12k per lift per year for planned and reactive maintenance
Assumptions:		
The following points cover the significant operational assumptions related to this project;		
The current operational processes in use for repatriation of passenger mobility equipment will continue.		

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
NIL	NIL	

Assumptions:	
The following points cover the significant operational assumptions related to this project;	
The current operational processes in use for repatriation of passenger mobility equipment will continue.	

Average Asset life:	
Average Asset Life:	10 years (Equipment based on HAL standard)
Commentary:	
Assets typically involve new lifts and associated infrastructure and controls. At T3 & T4 some minor changes to stand parking and storage are required to facilitate installation of the new lift shafts.	
<i>Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.</i>	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	None.
Commentary:	
None.	
<i>Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only.</i>	

Non Construction Risk:	
The following points cover any significant areas of risk for the Airline Community regarding this project.	
N/A	

Annex B: Project Delivery: Cost Information:

Project Information

Project Name: PRM & T3 Pier 7 Gateroom Lifts
BCT No.: 10653

Cost Information

All information extracted from March 2013 month end process

Base Costs:	£5,009,072	78.6	%
On-Cost:	£770,370	12.3	%
Opportunity	£0	0	%
Risk (R1 Allowance Only)	£358,500	6.0	%
Inflation	£227,058	3	%
Total	£6,365,000	100	%

Cost Benchmark Comparisons:	
Project Name:	PRM & T3 Pier 7 Gateroom lifts
Total Capital Budget (<i>Constant Prices</i>):	£6,365,000
Guidance Notes:	
Benchmarking will be completed as part of the Solutions Development stage and for the G3 gateway. High level benchmarking analysis will be derived from a range of sources including: actual cost data from comparable projects; benchmarked rates; supplier costs; and, prices obtained from HAL internal sources and appointed contractors.	

Annex C: Project Delivery:

High Level Project Plan:
G0 – Complete (January 2012)
G1 – Complete (September 2012)
G2 – Complete (January 2013)
G3 – Planned (May 2013)
G4 – Planned (July 2013)

Works commence on site – August 2013

T3 – Lift complete at Stand 316 & Stand 320 – February 2014
T4 – Lift complete at Stand 405 & Stand 411 – March 2014
T5 – Complete modifications to 8 No hoists - December 2013
Lift complete at Stand 534 & Stand 537 - March 2014

Header Information

BCT No.	10554
Op No.	25904
Project Name:	T3 Southwing HVAC Replacement

Project Overview, Objectives and Status

Overview:			
Description:	<p>The scope of this project includes the removal of the existing chilled beam cooling system, ceilings and lighting system and the provision of new and fit for purpose: four pipe fan coil heating / cooling systems, and new ceilings and lighting. A new ducted ventilation system will be provided to all accommodation areas.</p> <p>Carrying out the replacement of these systems with the current tenants remaining in-situ requires all works in occupied areas to be progressed out of hours with a phased approach whilst maintaining existing services.</p>		
Ref. Drawings / Images: <i>(Refer to Annex A)</i>	None.		
Objectives:			
HAL:	The key objective of this project is to provide a suitable working environment for tenants and staff and to comply with all relevant standards and regulations.		
Airline:	Suitable working environment.		
Project Benefits:			
The key benefits associated with this project are the provisions of a suitable working environment and compliance with building regulations. There are potential additional benefits of increased energy efficiency and reduced CO2 emissions.			
Status:			
Programme:	Project Gateway Stage:		
Terminal Restoration and Modernisation (Passenger Experience)	G4 - Implementation		
Airline Engagement:			
This project has been presented and endorsed at the T3 Stakeholder Programme Board in September 2011 and November 2011. Individual airline tenants located in the Southwing offices have been consulted around the implementation plans and are in agreement to proceed.			
Project Delivery			
Current Control Budget:			
Total Capital Budget <i>(Estimated At Completion)</i> :		£4,098,600	
<i>Refer to Annex B for cost information detail.</i>			
Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:

09/2011	06/2012	03/2013	Continual Use
<i>Refer to Annex C for programme information detail.</i>			
Assumptions:			
The following points cover the significant delivery assumptions related to this project;			
The key assumption associated with the delivery of this project is the provision of access to the tenanted areas in the Southwing offices. All tenants have been consulted and apprised of the proposals to carry out the works with the tenant's in-situ. Access to the offices will be agreed on a daily basis throughout the course of the project through detailed planning and consultation. It is assumed that all vacant areas within the Southwing offices will remain so until works are completed and no new tenants will move into Southwing until works are complete.			
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>			

Operational Issues

HAL Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Energy Consumption	-£79k	Estimated reduction in energy consumption associated with new lighting system.
	+£2,000,000	E.g. New retail unit enabled.
Assumptions:		
The following points cover the significant operational assumptions related to this project;		
None.		
Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
		N/A
Assumptions:		
The following points cover the significant operational assumptions related to this project;		
None.		
Average Asset life:		
Average Asset Life:	20 Years	
Commentary:		
Asset life of main HVAC Systems. Other systems, ceilings and lighting have an asset life of 10 years.		
<i>Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.</i>		
Impact on User Charges:		
Estimated Per Passenger Cost Impact:	2.5p	
Commentary:		
None.		
<i>Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only.</i>		

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project.
None.

Annex B: Project Delivery: Cost Information:

Project Information

Project Name: T3 Southwing HVAC Replacement
 BCT No.: 10554

Cost Information

All information extracted from March 2013 month end process

Base Costs:	£3,326,357.50	81%
On-Cost:	£691,242.50	17%
Opportunity	£0	0%
Risk (R1 Allowance Only)	£81,000.00	2%
Total	£4,098,600.00	100%

Commentary:

Cost Benchmark Comparisons:	
Project Name:	T3 Southwing HVAC Replacement
Total Capital Budget (<i>Constant Prices</i>):	£4,098,600
Guidance Notes:	
<p>The T3 South Wing HVAC Replacement project was benchmarked at the G4 Approval Gateway comparing a number of projects against the following key elements: HVAC, Suspended Ceilings, Lighting, Main Contractor's Preliminaries, Main Contractor's Overhead & Profit and Project On-Cost.</p> <p>The construction base costs were based on a Target Cost submitted from the supplier, in accordance with the project procurement strategy. The benchmarked elements in this instance represent approximately 60% of the EAC.</p> <p>All costs used in the comparison were price adjusted to 1st Quarter 2012 using the Building Cost Information Services (BCIS) Tender Price Index.</p> <p>The conclusion of the benchmarking exercise was that although the main contractor's overhead and profit is slightly higher than the average benchmark, the benchmarking report concludes that the project compares favourably with other projects.</p> <p><i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i></p>	

Header Information

BCT No.	10652
Op No.	30079
Project Name:	T3 CIP Lounge Remedial Works

Project Overview, Objectives and Status

Overview:	
Description:	Improvement works to the façade and roof.
Ref. Drawings / Images: <i>(Refer to Annex A)</i>	None at present.
Objectives:	
HAL:	Maintain rental income of CIP lounge.
Airline:	Improve passenger experience.

Project Benefits:
As this project is specifically related to defects from the time of construction. The benefit is to sustain the integrity of the existing structure and reduce reactive maintenance costs.

Status:	
Programme:	Project Gateway Stage:
Terminal Restoration and Modernisation	Solutions Development

Airline Engagement:
Engagement at the T3 Stakeholder Programme Board and airlines.

Project Delivery

Current Control Budget:			
Total Capital Budget <i>(Estimated At Completion):</i>		5,474,971	
<i>Refer to Annex B for cost information detail.</i>			
Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
02/2012	09/2013	03/2014	Continual use
<i>Refer to Annex C for programme information detail.</i>			
Assumptions:			
The following points cover the significant delivery assumptions related to this project;			
Lounge remains in full occupation throughout.			
Night time working.			
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>			

Operational Issues

HAL Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
		None.
Assumptions:		
The following points cover the significant operational assumptions related to this project;		
On-going reactive maintenance costs include scaffolding, protection and inspections.		

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
		None.
Assumptions:		
The following points cover the significant operational assumptions related to this project;		
Extend the building life to 20 years, in line with T3.		

Average Asset life:	
Average Asset Life:	3 Years
Commentary:	
Due to the on-going deterioration, works are required to extend the building life.	
<i>Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.</i>	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	2.5p
Commentary:	
None.	
<i>Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only.</i>	

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project.
There are no impacts on disruption to the airlines

Annex B: Project Delivery: Cost Information:

Project Information

Project Name: T3 CIP Lounge – Improvement works
BCT No.: 10652

Cost Information

All information extracted from March 2013 month end process

Base Costs:	£3,526,027	64	%
On-Cost:	£810,344	15	%
Project costs:	£494,725	9	%
Risk (R1 Allowance Only):	£643,875	12	%
Total	£5,474,971	100	%

Commentary:
None.

Cost Benchmark Comparisons:	
Project Name:	T3 CIP Lounge Remedial works
Total Capital Budget (<i>Constant Prices</i>):	5,474,971
Guidance Notes:	
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>	

Header Information

BCT No.	9644
Op No.	25267
Project Name:	T4 Departures Phase 2

Project Overview, Objectives and Status

Overview:	
Description:	<p>This project scope is to refurbish the Terminal 4 International Departure Lounge in accordance with the Masterplan. The works include:</p> <p>A new hard floor with conglomerate tile finish with the removal of the travolators; New gates, portals and desks; Raft ceiling and LED lit fins; New lighting and PA system; LV sub-station; Wayfinding; and, Media and improved air supply ductwork.</p> <p>The works are now complete in the main International Departure Lounge between Zones 2 and 8, and works are currently underway in Zone 1 and Zone 10 involving gates, portals and desk works, lighting, ventilation, flooring and ceiling works. Note Zone 9 of the lounge works consists of mainly the ceiling, gate and portal works. M&E works will be done as part of the North East Gates project. On site refurbishment works are also being prepared for the Air Handling Units serving the Departure Lounge to be funded from this project going into Q5+1.</p>
Ref. Drawings / Images: <i>(Refer to Annex A)</i>	See Annex A.
Objectives:	
HAL:	The key HAL objectives are to improve passenger experience, increase retail and commercial targets and achieve a key airline requirement for the terminal lounge to be significantly improved. Some of the works also improve the Opex and environmental targets for the terminal such as converting the main lighting to LED, and refurbishment of the air handling units which will bring efficiency savings and reduced maintenance.
Airline:	Airlines benefit from an improved passenger experience
Project Benefits:	
<p>Improve passenger experience with higher QSM scores, increased airline satisfaction with the improved environment and new facilities such as desks. There are energy efficiency savings from converting the main lighting to LED, reduced OPEX and maintenance costs from replacing life expired or old technology assets, reduced emissions from using modern assets such as the refurbishment of the AHU, increased commercial and retail revenue from a</p>	

more attractive passenger environment, and re-optimisation of the media provision facilitated by the refurbishment.

Status:	
Programme:	Project Gateway Stage:
Terminal Restoration and Modernisation	Construction and implementation
Airline Engagement:	
T4 Airline representatives have been consulted at the design stage on works that directly affect their operations such as the design of the gates and the desk layout. The airline representatives were also consulted with regarding any on site works which affected their operations and during the snagging phase when works are completed. Some of the consultations have been directly with the airlines.	

Project Delivery

Current Control Budget:			
Total Capital Budget (<i>Estimated At Completion</i>):		£21,490,000	
<i>Refer to Annex B for cost information detail.</i>			
Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
11 / 2011	01 / 2012	11 / 2013	Continual use
<i>Refer to Annex C for programme information detail.</i>			

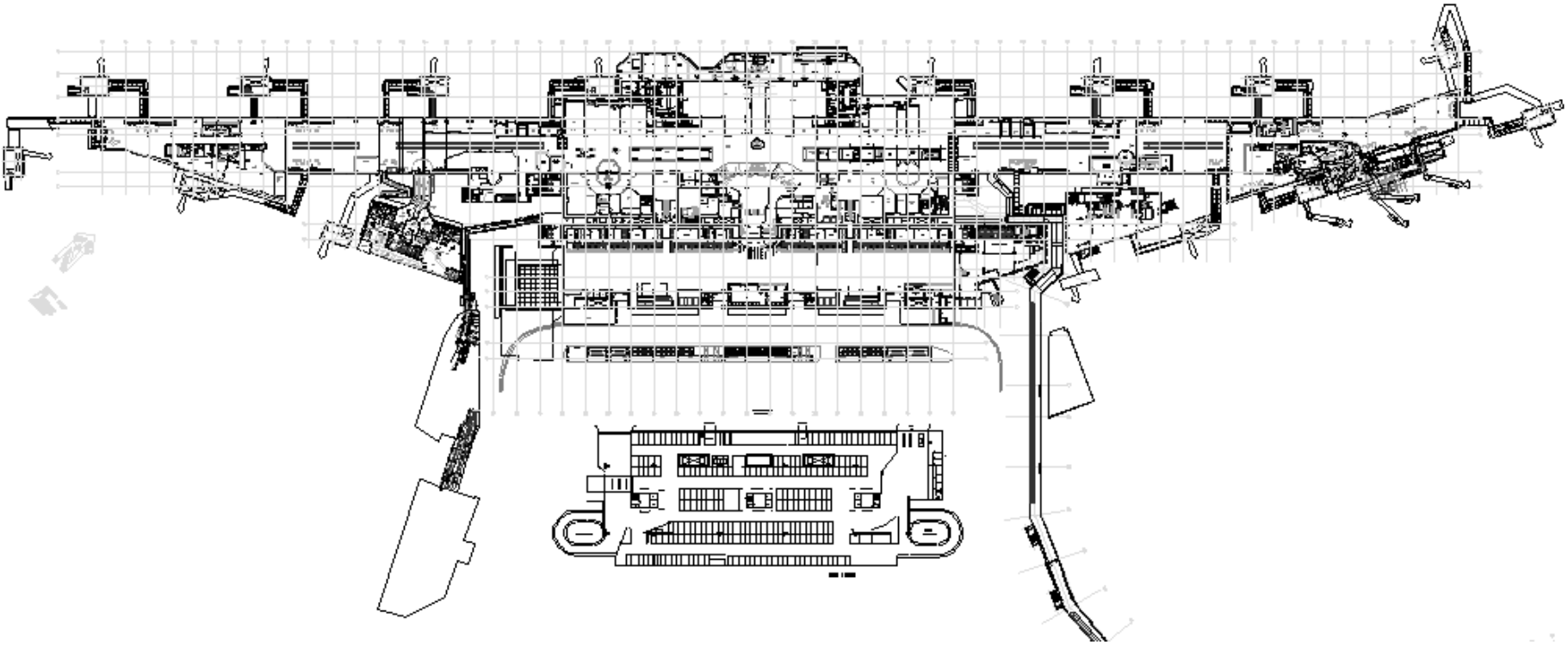
Assumptions:
The following points cover the significant delivery assumptions related to this project;
Main CBI contract started from January 2012 and a major milestone was achieved in June 2012 when the main flooring works were completed. The next major milestone was the completion of the main International Departure Lounge works which was achieved around January 2012. A Deed of Amendment was signed in November 2012 that extended the International Departure Lounge refurbishment works into Zone 1 and 10 with contract completion extended to May 2013. The AHU refurbishment will be tendered through the LPI route as a separate discrete piece of work. Contract award has been programmed for May 2013 and completion of works is programmed for approximately November 2013.
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>

Operational Issues

HAL Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Lighting	£64,000	Although new energy efficient LED lights have been installed, to meet the design LUX levels for the lounge the overall, lighting requirements are higher than what was in previously.
AHU	To be	OPEX costs for maintaining the AHU's will

	quantified	reduce after refurbishment works complete and the system will become more efficient
Additional Retail and Commercial Income	Increase retail spend per passenger from £3.75 to £3.86	
Assumptions:		
The following points cover the significant operational assumptions related to this project;		
Significant lighting has been installed which will increase electricity consumption but much of this lighting has LED based technology with lower maintenance requirements, and the bulbs last longer than previous bulbs. There is also a sophisticated DMX control lighting for the ceiling FINS, and HAL staff will need to be trained to maintain and programme this. Some of the air ductwork has been cleaned up after being exposed for the first time in many years which will reduce future maintenance and improve efficiency. The refurbishment of the Air Handling Units should reduce operational downtime and maintenance. New raft ceiling finish will also reduce maintenance of the old egg crate ceiling.		
Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
N/A		
Assumptions:		
The following points cover the significant operational assumptions related to this project;		
None.		
Average Asset life:		
Average Asset Life:	20+ years for main refurbishment works, floors, doors and gate portals, ceiling works. Some of the equipment and light fittings installed may have a shorter life of approximately 5 – 10 years	
Commentary:		
None.		
<i>Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.</i>		
Impact on User Charges:		
Estimated Per Passenger Cost Impact:	2.2p	
Commentary:		
None.		
<i>Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only.</i>		
Non Construction Risk:		
The following points cover any significant areas of risk for the Airline Community regarding this project.		
None.		

Annex A: Overview: Reference Drawing / Image:



Annex B: Project Delivery: Cost Information:

Project Information

Project Name: T4 Departures Phase 2
BCT No.: 9644

Cost Information

All information extracted from March 2013 month end process

Base Costs:	£17,271,334	80	%
On-Cost:	£3,986,616	19	%
Opportunity	£0	0	%
Risk (R1 Allowance Only)	£232,050	1	%
Total	£21,490,000	100	%

Commentary:

The majority of the project is now complete and has expended around 87% of its budget. In addition, the majority of the risks for the project have now passed and have either been realised or returned to the business. The remaining risk retained is to complete the work in Zone 1 and 10, and for the refurbishment of the Air Handling Units.

Cost Benchmark Comparisons:	
Project Name:	T4 Departures Phase 2
Total Capital Budget (<i>Constant Prices</i>):	
Guidance Notes:	
Project has been delivered to date within the original budget which has allowed approximately £4m to be returned to business and also to facilitate additional scope in other areas of the lounge and the refurbishment of the AHU.	
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>	

Annex C: Project Delivery: High Level Project Plan:

Key Project Plan Dates

Completion of Main IDL Works – 31 January 2013
Completion of Zone 1 and 10 Works – 10 May 2013
Completion of AHU Works – 17 October 2013
Project Close Down – 28 November 2013

Header Information

BCT No.	9844
Op No.	25180
Project Name:	T4 Airbridge Replacements

Project Overview, Objectives and Status

Overview:	
Description:	Terminal Four (T4) was opened in 1986. Many of the airbridges at the terminal are beyond their economic life and are amongst the least reliable at Heathrow. The airbridges have poor reliability, high maintenance costs and are in poor aesthetic condition. This project is the next stage in a planned airbridge renewal programme for T4. This project is required to support the needs of T4's airlines and passengers by delivering reliable and presentable airbridges which are of an equivalent standard to T5 and T2
Ref. Drawings / Images: <i>(Refer to Annex A)</i>	See Annex A.
Objectives:	
HAL:	The project will replace 11 life expired airbridges across T4. With an objective to: Support the needs of T4's airlines and passengers by delivering reliable and presentable Airbridges which are of an equivalent standard to T5 and T2; Reduce maintenance OPEX cost of airbridges at T4, and resolve component obsolescence issues associated with existing airbridges; and, Improve operational reliability (reduced downtime) of airbridges at T4.
Airline:	As per Heathrow above.

Project Benefits:

<p>The project will</p> <ul style="list-style-type: none"> - Deliver modern, reliable and presentable airbridges & improve Heathrow's ASQ / QSM scores. - Improve SQR ratings and reduce the risk of SQR penalties. - The new bridges will reduce maintenance costs and component obsolescence risk. - Benefits will be realised prior to full project completion as airbridges are delivered in sequence.
--

Status:

Programme:	Project Gateway Stage:
TRM	G0 – Complete G1 – Complete (Sept 2012) G2 – Complete (Oct 2012) G3 – Complete (Nov 2012) G4 – Complete (Nov 2012) G4a – Complete (April 2013) (additional stands)

Airline Engagement:

T4 Stakeholder Programme Board – September 2012 / December 2012 / February 2013

Project Delivery

Current Control Budget:			
Total Capital Budget (<i>Estimated At Completion</i>):		£13,204,876 (Phases 1+2)	
<i>Refer to Annex B for cost information detail.</i>			
Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
G4 - 28.11.2012	27.02.2013	04.03.2014	From 29.03.2013
<i>Refer to Annex C for programme information detail.</i>			
Assumptions:			
<p>The following points cover the significant delivery assumptions related to this project;</p> <p>Procurement lead times will meet delivery schedule.</p> <p>Contractor will be appointed within the procurement schedule.</p> <p>Airbridges will be delivered in sequence, with only one stand down at any time.</p> <p>Deliverables will be subject to no more than a specific number of review cycles.</p> <p>Equipment order lead times are known and can be expected to be met.</p> <p>Future aircraft types can be accommodated without moving rotunda / column locations.</p>			
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>			

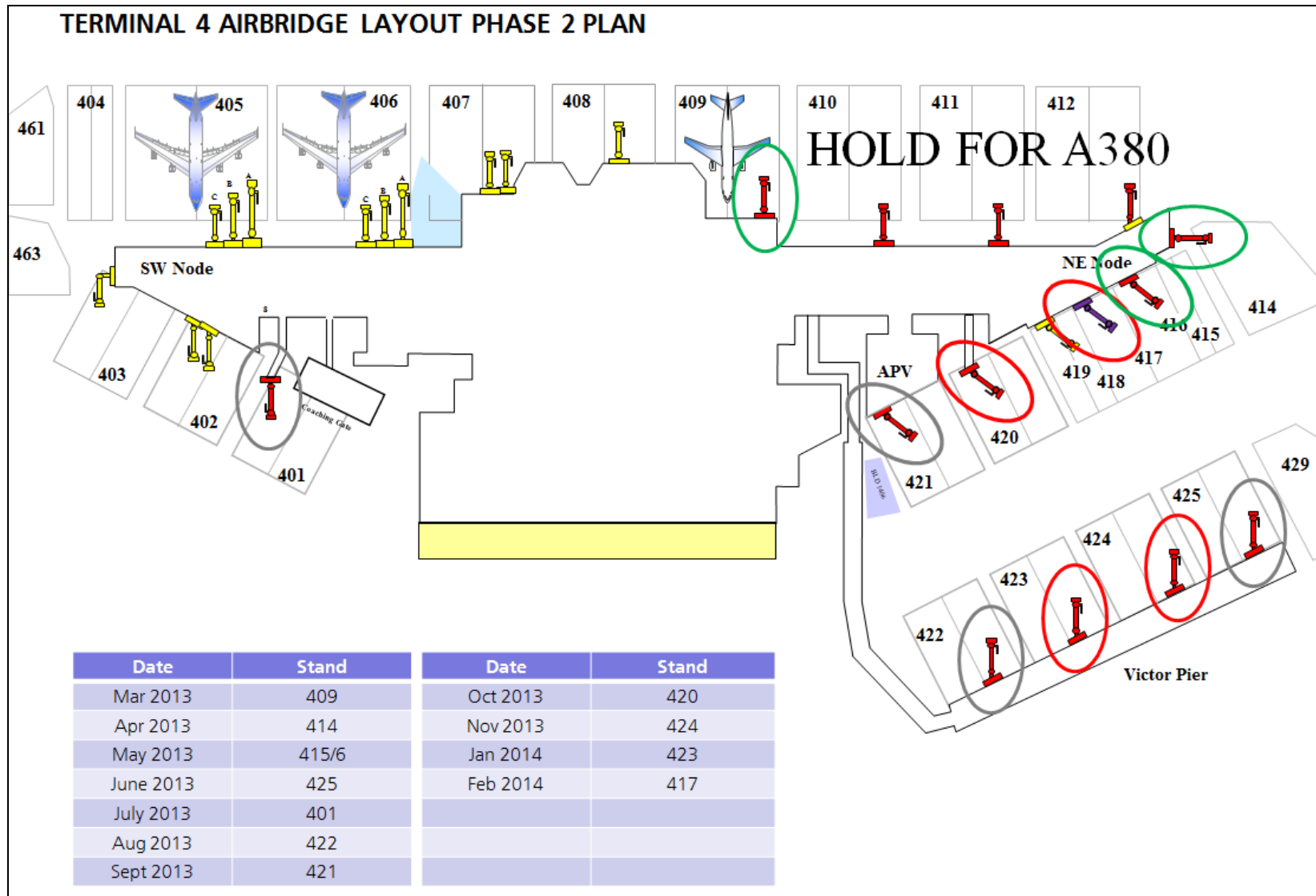
Operational Issues

HAL Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
TBC	Opex saving - £129,600 p.a.	Negligible Revenue impact Opex Saving based on £10.8k per bridge p.a.
Assumptions:		
<p>The following points cover the significant operational assumptions related to this project;</p> <p>Stands to be made available in accordance with schedule (including adjacent stands where required to facilitate lifting operations).</p> <p>Works, labour and material access in accordance with logistics plan.</p> <p>Works to be delivered both during day and night shifts (activity dependent).</p> <p>Allowance for 1 lost shift / month due to operational delay (e.g. late flights) or weather delays.</p>		
Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
NIL	NIL	
Assumptions:		
<p>The following points cover the significant operational assumptions related to this project;</p> <p>As above</p>		

Average Asset life:	
Average Asset Life:	25 years
Commentary:	
25 years (based on historic evidence of old bridges and manufacturers recommendations)	
<i>Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.</i>	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	1.1p
Commentary:	
None.	
<i>Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only.</i>	

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project.
N/A

Annex A: Overview: Reference Drawing / Image:



Annex B: Project Delivery: Cost Information:

Cost Information

Total

All information extracted from March 2013 month end process

Base Costs:	£ 11,014,256	83.4	%
On-Cost:	£ 1,737,795	13.2	%
Risk:	£ 452,825	3.4	%
Total	£13,204,876	100	%
	£13,200,000	(rounded)	

Phase 1

All information extracted from March 2013 month end process

Base Costs:	£ 4,839,316	90.1	%
On-Cost:	£ 529,583	9.9	%
Risk:	£ -	0.0	%
Total	£5,368,899	100	%
	£5,400,000	(rounded)	

Phase 2

All information extracted from March 2013 month end process

Base Costs:	£ 6,174,940	78.8	%
On-Cost:	£ 1,208,212	15.4	%
Risk:	£ 452,825	5.8	%
Total	£ 7,835,977	100	%

Header Information

BCT No.	9575
Op No.	24671
Project Name:	T5 CSA and Connections Capacity

Project Overview, Objectives and Status

Overview:	
Description:	<p>This project was initiated to alleviate the pressure on the security operation in Terminal 5 which has been brought about by the increase in the demand from connections traffic. The scope consists of installation of additional security capacity, a scheme to deliver four additional security lanes; the main scope items have been completed.</p> <p>In order to create the additional security footprint there was a requirement to adapt the adjacent infrastructure and resupply the accommodation.</p> <p>The remaining scope consists of the introduction of a lighting scheme in the area above an escalator, which is where connecting passengers enter the search area known as North CSA. This project is scheduled to be completed in June 2013.</p>
Ref. Drawings / Images: <i>(Refer to Annex A)</i>	None.
Objectives:	
HAL:	<p>This project will seek to improve passenger experience by alleviating the capacity constraints, this will be achieved by ensuring the security provision is aligned to passenger demand and enable the business to deliver against the following:</p> <ul style="list-style-type: none">Running the airport responsibility, safely and securely.Make Heathrow the preferred choice for passengers.Succeed through the airlines' successes.
Airline:	Improve the passenger and user experience of T5 by delivering a consistent service by having intuitive processes and security capacity to meet forecasted demand.

Project Benefits

Improved ASQ and QSM ratings:
Ease of making connection.
Improving service quality measures by the SQR scheme:
Security queue waiting time.
Enabling passengers to pass through the security process in a timely manner.
Support the operations team to work more efficiently and in a safe manner.
Make passengers feel that the area is under control.

Status: Implementation

Programme: Terminal Restoration and Modernisation	Project Gateway Stage:
---	------------------------

Airline Engagement:
Consultation was undertaken through the CIP Working Group as part of the Q5 projects and Q5+1 works. The project has been regularly presented at the T5 Stakeholder Programme Board and at the T5 COO Operations team meeting.

Project Delivery

Current Control Budget:			
Total Capital Budget (<i>Estimated At Completion</i>):			8,351,098
<i>Refer to Annex B for cost information detail.</i>			
Schedule: Phase 1 and Phase 11			
Brief Decision	Start on Site:	Completion on Site:	Operational Use Commences:
06 / 2011	01/ 2012	07/2013	05 / 2012
<i>Refer to Annex C for programme information detail.</i>			
Assumptions:			
The following points cover the significant delivery assumptions related to this project;			
A suitable design was identified and accepted by all stakeholders. The cost plan assumed that 50% of works would be completed at night to minimise the impact to the terminal operation during construction. The design and delivery would be undertaken in Q5+1.			
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>			

Operational Issues

HAL Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Staff	-£5m	Additional officers required to operate the increase in the number of security lanes estimated at this time.
Cleaning and Maintenance	-£300K	Assumed to be minimal but will be confirmed as the project progresses.
Loss on Disposals	None	
Additional Retail Income	N/A	No additional retail opportunities were identified.
Assumptions:		
The following points cover the significant operational assumptions related to this project;		
There is a potential for a reduction in Revenue as a result of this project.		
Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
		None expected.

Assumptions:
The following points cover the significant operational assumptions related to this project;
In order to best utilise the capacity available, the project has explored process opportunities in the check-in area to balance the concourse. It is assumed that any process changes will not have a cost impact on the airlines in T5

Average Asset life:	
Average Asset Life:	20 Years
Commentary:	
None.	
<i>Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.</i>	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	None
Commentary:	
None.	
<i>Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only.</i>	

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project.
Failure to provide additional security capacity would have restricted the development of airline business in terms of connecting routes at Heathrow. These will not only impact airlines which operate from Terminal 5, but airlines which have the opportunity to sell flights with a connection opportunity at Heathrow. Note: The additional lane capacity was provided by May 2012.

Annex B: Project Delivery: Cost Information:

Project Information

Project Name: T5 CSA and Connections Capacity
BCT No.: 9575

**Cost
Information**

All information based on March 2013 month end process.

Estimated to
completion

Base Costs:	£6,897,884	84	%
Specifics	£0	0	%
On-Cost:	£1,453,214	16	%
Risk	£0	0	%
Total	£8,351,098	100	%

Commentary:

Annex C: Project Delivery: High Level Project Plan:

Start on Site January 2012
Delivery of four additional lanes
2 Lanes in North CSA February 2012
2 Lanes in South CSA May 2012
Additional cooling
Lighting scheme above Connections escalator
Finish on Site June 2013

Header Information

BCT No.	10826
Op No.	30486
Project Name:	Asset Replacement

Project Overview, Objectives and Status

Overview:	
Description:	<p>The Asset Replacement portfolio consists of a large number of smaller, lower value projects bundled to maximise delivery efficiency. Predominantly the projects are asset replacements however, this portfolio also includes compliance, QSM, and health and safety works. Works are delivered across the whole of Heathrow (excluding baggage), terminals, airside, landside, Retail, and Property.</p> <p>The works are prioritised and the agreed list presented and approved by the Infrastructure Stakeholder Programme Board and the CIP Working Group. The project has a fixed budget and timeline, completing by 31 March 2014.</p>
Ref. Drawings / Images:	None.
Objectives:	
HAL:	<p>Support the Heathrow operation through investment in critical assets and facilities to:</p> <ul style="list-style-type: none">Avoid unplanned operational expenditure from asset failures.Improve the passenger experience (QSM).Address Health and safety issues.Address compliance issues.
Airline:	As per Heathrow.

Project Benefits:

Asset Replacement is a diverse portfolio of works delivering a range of benefits that support improving the passenger journey, operational efficiency, compliance, and health and safety.

Status:

Programme:	Project Gateway Stage:
Terminal Restoration and Modernisation	Solution Development

Airline Engagement:

The Asset Replacement plan is presented to the Infrastructure Stakeholder Board at the start of a period for consultation and agreement, and subsequently on a quarterly basis to update on progress.

Project Delivery

Current Control Budget:

Total Capital Budget (<i>Estimated At Completion</i>):	£26,400,000
<i>Refer to Annex B for cost information detail.</i>	

Schedule:

Brief	Start on	Completion on	Operational Use
-------	----------	---------------	-----------------

Decision:	Site:	Site:	Commences:
November 2012	April 2013	March 2014	Various

The following points cover the significant delivery assumptions related to this project:

The EAC of the portfolio is fixed and the scope is flexed to meet the business needs and the available budget.

Expenditure is time bound to the extended quinquennium.

Frameworks for 3 LPIs are maintained to ensure competition.

Individual works are delivered in co-ordination with business units to mitigate operational disruption.

Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.

Operational Issues

HAL Financial Revenue and Operational Cost (Opex) Impact:

Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
N/A	N/A	N/A due to the nature of individual works

Assumptions:

The following points cover the significant operational assumptions related to this project:

The prioritisation of the works is timed to mitigate unplanned operational costs and financial penalty due to non-compliance.

Airline Financial Revenue and Operational Cost (Opex) Impact:

Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
N/A	N/A	N/A due to the nature of individual works

Assumptions:

The following points cover the significant operational assumptions related to this project:

None

Average Asset life:

Average Asset Life:	Various
---------------------	---------

Commentary:
None

Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.

Impact on User Charges:

Estimated Per Passenger Cost Impact:	N/A
--------------------------------------	-----

Commentary:
None.

Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only

Non Construction Risk:

The following points cover any significant areas of risk for the Airline Community regarding this project:

None.

Header Information

BCT No.	10232
Op No.	25546
Project Name:	2011 – 2012 Minor Projects

Project Overview, Objectives and Status

Overview:	
Description:	<p>The Minor Projects portfolio consists of a large number of smaller, lower value projects bundled to maximise delivery efficiency. Predominantly asset replacement and refurbishment projects however Minor Projects also includes compliance, QSM, and health and safety works. Works are delivered across the whole of Heathrow (excluding baggage), terminals, airside, landside, Retail and Property.</p> <p>The works are prioritised on an annual basis from the overall Q5 minor projects allocation, however to maximise the ability to deliver the entire portfolio the current period runs from January 2011 to March 2013. Additional scope has been added throughout the delivery extending this into Q5+1.</p>
Ref. Drawings / Images:	None.
Objectives:	
HAL:	<p>Support the Heathrow operation through investment in critical assets and facilities to:</p> <p>Avoid unplanned operational expenditure from asset failures.</p> <p>Improve the passenger experience (QSM).</p> <p>Address Health and safety issues.</p> <p>Address compliance issues.</p>
Airline:	As per Heathrow

Project Benefits:

Minor Projects is a diverse portfolio of works delivering a range of benefits that support improving the passenger journey, operational efficiency, compliance, and health and safety.

Status:

Programme:	Project Gateway Stage:
Terminal Restoration and Modernisation	Implement

Airline Engagement:

The Minor Projects plan is presented to the Infrastructure Stakeholder Programme Board at the start of a period for consultation and agreement Quarterly updates on progress.

Project Delivery

Current Control Budget:

Total Capital Budget (<i>Estimated At Completion</i>):	£61,570,633
<i>Refer to Annex B for cost information detail.</i>	

Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
Various	Various	Various	Various

The following points cover the significant delivery assumptions related to this project:

The EAC of the portfolio is fixed and the scope is flexed to meet the business needs and available budget.

Individual project contracts can roll from year to year within the extended Q5 period.

Frameworks for 3 LPs are maintained to ensure competition.

Individual works are delivered in coordination with business units to mitigate operational disruption.

Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.

Operational Issues

HAL Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
N/A	N/A	N/A due to the nature of individual works
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
The prioritisation of the works is timed to mitigate unplanned operational costs and financial penalty due to non-compliance.		

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
N/A	N/A	N/A due to the nature of individual works
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
None.		
Average Asset life:		
Average Asset Life:	Various	
Commentary:		
None.		
<i>Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.</i>		
Impact on User Charges:		
Estimated Per Passenger Cost Impact:	N/A	
Commentary:		
Various Projects.		
<i>Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only</i>		
Non Construction Risk:		

The following points cover any significant areas of risk for the Airline Community regarding this project:

None.

Header Information

BCT No.	10295
Op No.	25712
Project Name:	Retail Concessions
<u>Project Overview, Objectives and Status</u>	
Overview:	
Description:	Delivery of the 2013 Concessions Business Plan
Ref. Drawings / Images:	None.
Objectives:	
Heathrow:	Avoid unplanned operational expenditure from asset failures. Improve the passenger experience (QSM). Address health and safety issues. Address compliance issues. Protect business plan income. Deliver incremental income.
Airline:	As per Heathrow.

Project Benefits:

Benefits, deliver compliant S & C upgrades, protect 2013 Concessions business plan, and to deliver incremental income.

Status:

Programme:	Project Gateway Stage:
Terminal Restoration and Modernisation	Solution Development

Airline Engagement:

Airline community was advised of the Concessions 2013 Business Plan and funding approval was requested at the CIP Working Group.

Project Delivery

Current Control Budget:

Total Capital Budget (*Estimated At Completion*): £3,077,321

Refer to Annex B for cost information detail.

Schedule:

Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
Various	Various	March 2014	Various

The following points cover the significant delivery assumptions related to this project:

The EAC of the portfolio is fixed and the scope is flexed to meet the business needs and available budget.

The expenditure is time bound to the extended quinquennium.

Individual works are delivered in co-ordination with business units to mitigate operational disruption.

Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.

Operational Issues

HAL Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
N/A	N/A	N/A due to the nature of individual works
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
Projects are prioritized as follows: Health & Safety Passenger experience Compliance Protect income Incremental income		

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
N/A	N/A	N/A due to the nature of individual works
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
None		

Average Asset life:	
Average Asset Life:	Various
Commentary:	
None.	
<i>Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.</i>	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	N/A
Commentary:	
Various Projects.	
<i>Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only</i>	

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project:
None.

Header Information

BCT No.	10296
Op No.	25714
Project Name:	Retail Services

Project Overview, Objectives and Status

Overview:	
Description:	Deliver the 2013 Services Business Plan
Ref. Drawings / Images:	None
Objectives:	
HAL:	Avoid unplanned operational expenditure from asset failures. Improve the passenger experience and QSM scores. Address Health and Safety issues. Address compliance issues. Protect business plan income. Deliver incremental income.
Airline:	As per Heathrow.

Project Benefits:

Benefits, deliver compliant S & C upgrades, protect 2013 Concessions business plan, and deliver incremental income.

Status:

Programme:	Project Gateway Stage:
Terminal Restoration and Modernisation	Solution Development

Airline Engagement:

Airline community advised of Services 2013 business plan and requested funding approval at CIP Working Group.

Project Delivery

Current Control Budget:

Total Capital Budget (*Estimated At Completion*): £3,644,000

Refer to Annex B for cost information detail.

Schedule:

Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
Various	Various	March 2014	Various

The following points cover the significant delivery assumptions related to this project:

The EAC of the portfolio is fixed and the scope is flexed to meet the business needs and available budget.

Expenditure is time bound to the extended Q.

Individual works are delivered in coordination with business units to mitigate operational disruption.

Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.

Operational Issues

HAL Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
N/A	N/A	N/A due to the nature of individual works
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
Projects are prioritized as follows health and safety, compliance, protect income, incremental income, and passenger experience.		

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
N/A	N/A	N/A due to the nature of individual works
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
None.		

Average Asset life:	
Average Asset Life:	Various
Commentary:	
None.	
<i>Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.</i>	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	N/A
Commentary:	
Various Projects.	
<i>Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only</i>	

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project:
None.

Header Information

BCT No.	10692
Op No.	30280
Project Name:	Fast Track Upgrade

Project Overview, Objectives and Status

Overview:	
Description:	Provide upgraded Fast Track Security facilities in T1, T3 and T4 and increased security capacity in T3 and T4 direct CSA's.
Ref. Drawings / Images:	Refer to Annex A.
Objectives:	
HAL:	Increase security capacity in T3 and T4. Provide a fully differentiated, enhanced Fast Track security experience for Premium passengers.
Airline:	Provide a fully differentiated, enhanced Fast Track security experience for Premium passengers.

Project Benefits:
Increased CSA capacity in T3 and T4. Improved premium passenger QSM scores in the security screening areas. Support airline yields by enhancing premium product.

Status: In progress	
Programme:	Project Gateway Stage:
TR&M	Gate 2 passed

Airline Engagement:
Project has been endorsed by the affected airlines at the relevant Terminal Stakeholder Programme Boards, and at the CIP Working Group.

Project Delivery

Current Control Budget:			
Total Capital Budget (<i>Estimated At Completion</i>):		£10,962,775	
<i>Refer to Annex B for cost information detail.</i>			
Schedule:			
Gate 2:	Start on Site:	Completion on Site:	Operational Use Commences:
01 / 2013	05 / 2013	03 / 2014	10 / 2013
<i>Refer to Annex C for programme information detail.</i>			
Assumptions:			
The following points cover the significant delivery assumptions related to this project; All facilities must remain open through the delivery phase. All passenger facing work must be completed at night. T2 Fast Track Facility will be provided by the T2 team to the same product specification.			
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>			

Operational Issues

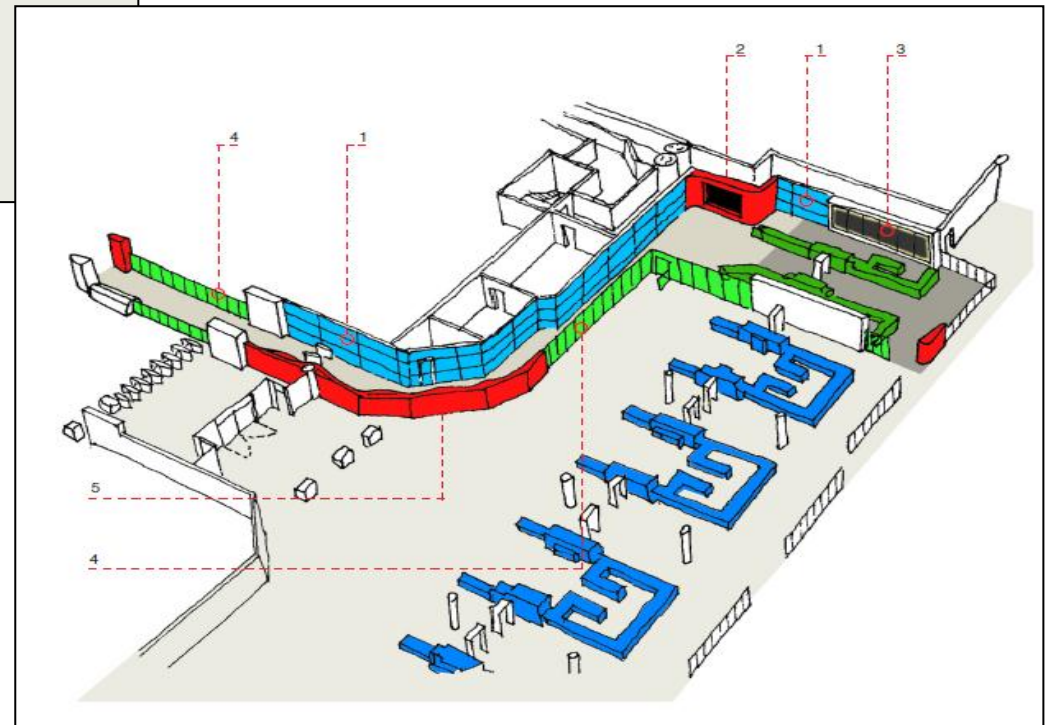
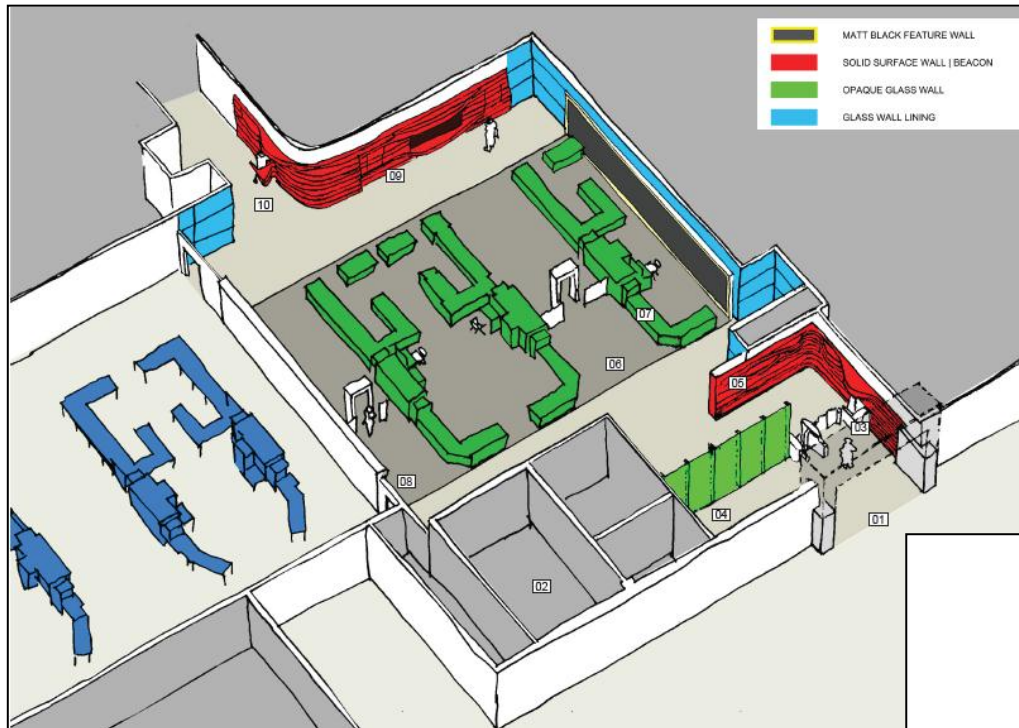
HAL Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact	Commentary:

	per Annum:	
Security	T1 £0.3m+ T3 £1.7m+ T4 £0.8m+	Resource required to meet the process time and service standards.
Airline Charges for Fast Track Facility	T1 £0.69+ T3 £1.46+ T4 £1.80+	All additional costs (per passenger) will be charged to the user airlines.
Media Revenue	TBC	Additional revenue not confirmed. Any such income will contribute to the "single till".
Assumptions:		
The following points cover the significant operational assumptions related to this project;		
None.		

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
No effects foreseen		
Assumptions:		
The following points cover the significant operational assumptions related to this project;		
The Airlines are not expected to increase their manning levels to operate the Fast Track facilities.		
Average Asset life:		
Average Asset Life:	10 Years	
Commentary:		
New assets are mainly decorative walls and floors which will require freshening at regular intervals as well as new security equipment equivalent to the New Model Line solution.		
<i>Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.</i>		
Impact on User Charges:		
Estimated Per Passenger Cost Impact:		
Commentary:		
None.		
<i>Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only.</i>		

Non Construction Risk:		
The following points cover any significant areas of risk for the Airline Community regarding this project.		
If any of the Airlines withdraw from the Fast Track agreement, the costs for the remaining Airlines will increase.		

Annex A: Overview: T3 (Top Left) and T4 (Bottom Right) Fast Track CSA layout.



Annex B: Project Delivery: Cost Information:

Project Information

Project Name: Premium Security Fast Track
BCT No.: 10847

Cost Information

All information extracted from March 2013 month end process

Base Costs:	£8,555,075	78	%
On-Cost:	£1,041,066	9.5	%
Opportunity	£0	0	%
Risk (R1 Allowance Only)	<u>£1,366,634</u>	12.5	%
Total	£10,962,775	100	%

Commentary:

The funding for the project has been sanctioned in 3 parts:-

£ 100,000 for "Intellectual" works

£3,212,000 for T4 (£3.012m) and interim design funding for T1/T3 (£0.2m)

£7,701,000 for T3 / T1

NB: Total Budget (£11,012,611) differs from the EAC (£10,962,775), which will vary slightly as the project design progresses, but will not exceed the Total Budget figure.

Cost Benchmark Comparisons:	
Project Name:	Fast Track Upgrade
Total Capital Budget (<i>Constant Prices</i>):	£11,012,611
Guidance Notes:	
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>	

Appendix D: Airport Capacity Optimisation

9501	Heathrow Resilience
3871	Baggage Combined Control Centres
10749	Airside Operational Building
10857	T3 Additional PCA Infrastructure Project
10377	T4 ABF 1-75 (Phase 2)
10429	T4 Baggage Reclaim Hall Expansion
10448	T5 TTS Enhancements
10495	Stands Infrastructure
10682	T3 Pier 5 Capacity Phase 2-3
10802	Loading Bay Enhancements T3 & T4

Activity ID	Activity Name	Remaining Duration	Start	Finish	2013												2014												2015		
					A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M			
Western Baggage Product																															
		780	02-Apr-13	31-May-16																											
Design & Procure																															
		379	02-Apr-13	08-Oct-14																											
Other																															
10545-A	T4 APV summary design	16	02-Apr-13	23-Apr-13																											
10662-A	T5 EBS expansion design	379	02-Apr-13	08-Oct-14																											
10712-A	T3IB Transfer Docks design	167	02-Apr-13	25-Nov-13																											
Implement																															
		676	02-Apr-13	18-Dec-15																											
T3IB																															
03801-C	T3IB Building	146	02-Apr-13	25-Oct-13																											
03801-D	T3IB Baggage	362	02-Apr-13	15-Sep-14																											
03801-E	T3IB HBS Existing Building	431	02-Apr-13	19-Dec-14																											
03801-G	T3IB IT	676	02-Apr-13	18-Dec-15																											
03801-H	T3IB Existing buildings - buildings	292	16-Sep-14*	18-Nov-15																											
03801-J	T3IB Existing buildings - baggage	658	26-Apr-13*	18-Dec-15																											
Other																															
09992-B	Heathrow Integrated Baggage System (HIBS)	148	02-Apr-13	29-Oct-13																											
10545-B	T4 APV HBS replacement production design	61	24-Apr-13	19-Jul-13																											
10545-C	T4 APV HBS replacement	57	22-Jul-13	09-Oct-13																											
10658-B	T5 Western Baggage Upgrade	249	02-Apr-13	02-Apr-14																											
10712-B	T3IB Transfer Docks Relocation - Modify Building	80	26-Nov-13	31-Mar-14																											
10712-C	T3IB Transfer Docks Relocation - Main Installation	124	01-Apr-14	26-Sep-14																											
Commission																															
		723	24-Jun-13	31-May-16																											
T3IB																															
03801-K	T3IB Test transition and transition	723	24-Jun-13*	31-May-16																											
Other																															
09992-D	Heathrow Integrated Baggage System (HIBS) commission	79	30-Oct-13	03-Mar-14																											
10712-D	T3IB Transfer Docks commission	75	29-Sep-14	23-Jan-15																											

Implementation
 Sub Project Impl.
 Design
 Implementation
 Transition
 Milestone

Header Information

BCT No.	9501
Op No.	24679
Project Name:	Heathrow Resilience

Project Overview, Objectives and Status

Overview:	
Description:	This project includes multiple projects / work packages and initiatives aimed at allowing the ending of the Cranford agreement and improving the resilience of the airfield.
Ref. Drawings / Images:	
Objectives:	
HAL:	Improve the resilience of the airport operation. The key objectives being; Improve punctuality and predictability at Heathrow airport. Improve Heathrow airport's ability to reorganise runway usage during periods of unplanned high demand. Facilitate effective and timely recovery of aircraft flow rate. Implementation of departures on 09L which redistributes noise around the airport by operating 09L as the designated departure runway in conjunction with a runway alternation pattern providing a robust and sustainable operation. Note that Rapid Exit Taxiways (RETs) are delivered as part of the Southern Runway Resurfacing works, which is a separate project
Airline:	To reduce delays and cancelled flights.

Project Benefits:

Improved departures and arrivals punctuality.
Reduce numbers of cancellations, with a consequent increase of aeronautical and retail revenue.
A reduction in the numbers of night jet movement dispensations.
An improvement in aircraft efficiency through the elimination of excess time in schedules.
Improvements in QSM and ASQ scores.
Improvements in our reputation amongst airline and external stakeholders.

Status:

Programme:	Project Gateway Stage:
Capacity Optimisation	Provision of taxiways to enable easterly alternations is under construction in the G4, implementation phase Other operational resilience studies / initiatives and packages are in various pre-implementation phases.

Airline Engagement:
Airline engagement on the Heathrow Resilience Programme is achieved through a dedicated Heathrow Resilience Steering Group and the Infrastructure Stakeholder Board.

Project Delivery

Current Control Budget:	
Total Capital Budget (<i>Estimated At Completion</i>):	£35,926,203
<i>Refer to Annex B for cost information detail.</i>	

Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
03 / 2010	03 / 2012	09/2013	06/2013

Assumptions:
The following points cover the significant delivery assumptions related to this project:
Taxiway and RETS will be delivered in Q5. RETs are now delivered under the Runway Resurfacing project; capital costs have been transferred to this project and are not included in the control budget above. Planning approval and procurement will be progressed in Q5. A-CDM & SEGs networking to be delivered in Q5. Other studies to review options to improve the airfield resilience include the following work packages: Airfield and surface management efficiency; Arrival efficiency ; Departure efficiency; and, Operational Freedom trials.
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>

Operational Issues

HAL Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
TBC	None	IT Support SEGS & A-CDM

Assumptions:
The following points cover the significant operational assumptions related to this project:
Impacts and benefits associated with easterly alternations will start when easterly alternations commences. The project aim is to review operational process and procedures to explore opportunities for efficiencies – as part of this process we will be establishing a methodology to measure and quantify the financial impacts of improving airfield resilience.

Airline Financial Revenue and Operational Cost (Opex) Impact:
--

Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
None	None	None

Assumptions:

The following points cover the significant operational assumptions related to this project:

Airline revenue and Opex impact of taxiways delivered in Q5 is negligible. Other initiatives are in the study phase in Q5, as part of this Heathrow will be determining and agreeing a methodology to measure the impacts.

Average Asset life:

Average Asset Life:	30 Years
---------------------	----------

Commentary:

30 years is the typical design life of the new pavement in the WP to enable the ending of the Cranford agreement.

Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.

Impact on User Charges:

Estimated Per Passenger Cost Impact:	3.2p
--------------------------------------	------

Commentary:

None

Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only (see Section 5.3 for further details)

Non Construction Risk:

The following points cover any significant areas of risk for the Airline Community regarding this project:

None

Annex B: Project Delivery: Cost Information:

Project Information

Project Name: Heathrow Resilience
BCT No.: 9501

Cost Information

All information extracted from March 2013 month end

Base Costs:	£30,863,733	86	%
On-Cost:	£3,671,973	10	%
Opportunity	£0	0	%
Risk (R1 Allowance Only)	£1,390,500	4	%
Total	£35,926,203	100	%

Commentary:

This cost information refers to the whole Heathrow Resilience Programme and therefore contains information on a number of different elements.

Cost Benchmark Comparisons:	
Project Name:	Heathrow Resilience
Total Capital Budget (<i>Nominal Prices</i>):	£42,559,847
Guidance Notes:	
<p>WP 2&3 Taxiways enabling the ending of the Cranford agreement was benchmarked in the September 2010 Options paper. Key points are: The base cost includes an amount of 'abnormals' (noise attenuation wall to Longford Village, removing earth mounds north of T5, special protection to major mains services, works to links N5E, N5W & N4E, and creation of land drainage areas to offset new pavement areas). When 'abnormals' are excluded, the base cost is comparable to other similar projects. Because the works have to be carried out during temporary, nightly possessions of areas of runways and taxiways, with return to live operations each morning, the roller compacted concrete with asphalt overlay method of construction has been identified as the most appropriate for the new RAT / Links, RETs and Sierra Taxiway Code F works. Although this form of construction carries a cost premium, the overall benchmark remains comparable due to large areas in the project comprising (lower cost) re-surfacing only works. Project Specifics reflect the 100% night shifts, non-sequential working, with no runway de-alternation or permanent site closures. The Risk provision allows for the complex planning and programming issues, third party requirements associated with this project, and additional construction risks.</p>	
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>	

Header Information

BCT No.	3871
Op No.	25193
Project Name:	Baggage Combined Control Centres

Project Overview, Objectives and Status

Overview:	
Description:	<p>This project will deliver:-</p> <p>A centralised baggage PRODUCT Control Centre located next to the Airport Operational Centre (APOC) in Compass Centre. This control room will have standby capability for the Baggage System control room at T5.</p> <p>A centralised baggage SYSTEM Control Centre located in T5 with standby capability for the baggage Product Control Centre in the Compass Centre.</p> <p>A centralised HBS screening room located in T3IB for T1/2/3/4 with standby capability for T5. T5 would retain its main screening capability locally. A standby T1/2/3/4 HBS screening room will be located in T1.</p> <p>A revised set of operating procedures and working practice agreements to optimise the efficiency of both the Baggage Control rooms and the HBS control rooms.</p> <p>The HBS screening rooms and the Baggage Control Centres will be created with adequate infrastructure and fully fitted out with new equipment. The project will meet all legislative and in-house standards.</p>
Ref. Drawings / Images:	Refer to Annex A.
Objectives:	
HAL:	<p>The key objectives of this project are to:</p> <p>Maximise the effectiveness and efficiency of the baggage operation through a centralised approach to command and control.</p> <p>Maintain or improve process integrity.</p> <p>Reduce the operating cost of the baggage operation to Heathrow Airport Limited and our Airlines.</p> <p>Support a management structure and collaborative culture of operations that enables a pre-emptive and strategic response to disruptive events.</p> <p>Improve operational control and resilience through an approach aligned to the APOC Programme.</p>
Airline:	<p>Improved service through an efficient and centralised approach to Baggage system control.</p> <p>Reduced operating costs.</p>
Project Benefits:	
<p><i>Resilience</i> – Co-located functions in a combined, cross-campus control centre to enable enhanced communications, greater situational awareness and a more</p>	

strategic approach to daily operational planning. This identified benefit requires an understanding of how existing communications and airport wide collaboration can be improved against the current 'as-is' state to determine measurable outcomes.

Reduced Operating Costs – Consolidation of control centres, specifically HBS screening rooms, will enable reduced OPEX for both Heathrow and the airlines. Reduced operating costs for HBS screening will be agreed with the AOC prior to the project proceeding past Gate 2, and will be confirmed on completion of the transition into operation. Reduced costs for Heathrow will be realised through transition into operation and implementation of the Baggage O&M strategy.

Status:	
Programme:	Project Gateway Stage:
Airport Resilience – Capacity Optimisation	Solution Development

Airline Engagement:
Airline engagement has been through the Airline Working Group meetings, which includes AOC representation. Formal endorsement has been achieved through the Western Baggage Product & Baggage Strategy Stakeholder Board. The last formal consultation was on 11 February 2013 at Gate 2 (Options) where the project was endorsed to proceed with Solution Development.

Project Delivery

Current Control Budget:			
Total Capital Budget (<i>Estimated At Completion</i>):		£9,775,651	
<i>Refer to Annex B for cost information detail.</i>			
Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
October 2010	October 2013	September 2014	From June 2014
<i>Refer to Annex C for programme information detail.</i>			

Assumptions:
The following points cover the significant delivery assumptions related to this project;
The key assumptions associated with this project are: The location of the Consolidated HBS screening room in T3IB assumes that the space allocated for the T3/T3IB control room and screening room can be converted for this use. The location of the standby BHS control room on the second floor of the Compass Centre East block is agreed regardless of the location of APOC.
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>

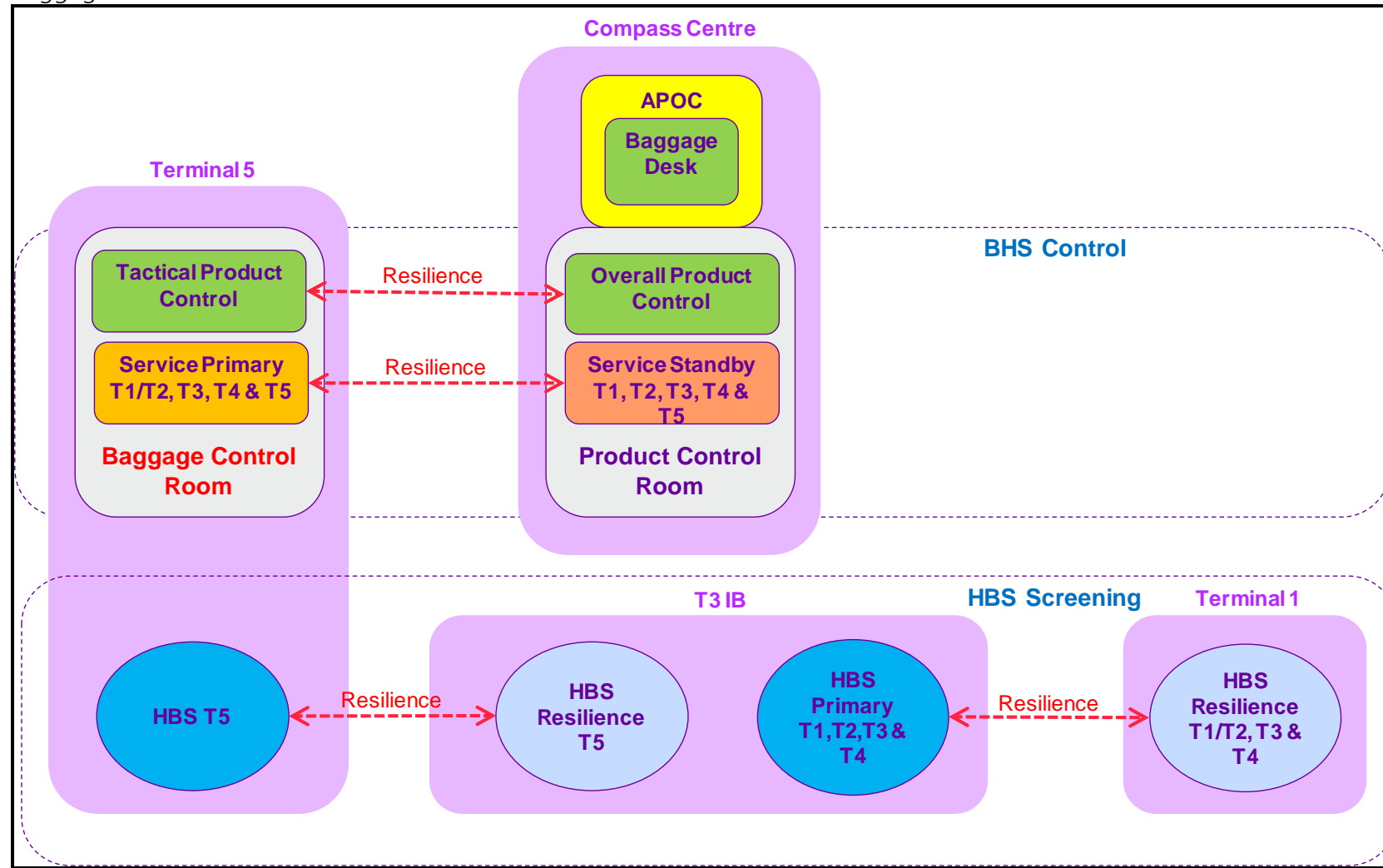
Operational Issues

HAL Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Baggage	-£660,000	Reduction in resource and facility efficiencies

		associated with a reduced number of baggage control rooms.
Assumptions:		
The following points cover the significant operational assumptions related to this project;		
It is assumed that the revised organisation required to operate the consolidated BHS control room will be implemented through the Baggage O&M contract.		

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
HBS Facilities	-£55,000	Reduced level of facility requirements.
HBS Resources	-£896,000	Reduction in airline operating costs associated with the reduced resourcing levels required for a consolidated screening operation. It is expected that this project will enable a better matrix of screening positions once Standard 3 HBS machines are introduced leading to a further reduction in operating costs of up to £3,000,000 per annum.
Assumptions:		
The following points cover the significant operational assumptions related to this project;		
It is assumed that the revised organisation and resourcing levels required for the Consolidated HBS operation will (in agreement with airlines, the AOC and their appointed contractors) be implemented and managed through the AOC.		
Average Asset life:		
Average Asset Life:	10 Years	
Commentary:		
This project consists of facility refurbishments / modifications, infrastructure and IT.		
<i>Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.</i>		
Impact on User Charges:		
Estimated Per Passenger Cost Impact:	NIL	
Commentary:		
None.		
<i>Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only.</i>		
Non Construction Risk:		
The following points cover any significant areas of risk for the Airline Community regarding this project.		
None.		

Annex A: Overview: Reference Drawing / Image:
 Baggage Combined Control Centres - Locations



Annex B: Project Delivery: Cost Information:

Project Information

Project Name: Baggage Combined Control Centres
BCT No.: 3871

Cost Information

All information extracted from March 2013 month end process

Base Costs:	£6,509,039	67	%
On-Cost:	£1,845,362	18	%
Opportunity	£0	0	%
Risk (R1 Allowance Only)	£1,421,250	15	%
Total	£9,775,651	100	%

Cost Benchmark Comparisons:	
Project Name:	Baggage Combined Control Centres
Total Capital Budget (<i>Constant Prices</i>):	£12,000,000
Guidance Notes:	
Facility costs are currently based on benchmark rates/m2 against the Compass Centre East Block project. At this stage there is limited scope definition around the IT solution, specifically network capacity due to the uncertainty of the impact of Standard 3 HBS machines.	
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>	

Header Information

BCT No.	10749
Op No.	30264
Project Name:	Airside Operational Building

Project Overview, Objectives and Status

Overview:	
Description:	Heathrow Airside Operations and Engineering have a number of specialist departments which each have a considerable amount of personnel based in different locations across the airfield. This project will increase efficiency, productivity and remove any financial and logistical implications. This project will improve productivity of the Airside Operations teams through co-location, into a single facility located Airside.
Ref. Drawings / Images: <i>(Refer to Annex A)</i>	None
Objectives:	
HAL:	Improve the productivity and efficiency of the Airside Operations teams, through the co-location of the former ATS (Airside Transport Services) and ASD (Airside Safety Department) departments, into a single facility located Airside.
Airline:	Improved airline and passenger experience due to faster response times to events Airside.

Project Benefits:

Reduction in operating expenditure of Airside Operations teams.
Improved resilience of Airside Operations teams.
Improved customer experience for Passengers and Airlines.

Status:

Programme:	Project Gateway Stage:
Airport Resilience	Options

Airline Engagement:

CIPWG – January 2013 (Q5 monies approved)

Project Delivery

Current Control Budget:

Total Capital Budget <i>(Estimated At Completion):</i>	£9,000,000
--	------------

Refer to Annex B for cost information detail.

Schedule:

Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
01/2013	10/2013	03/2014	05/2014

Refer to Annex C for programme information detail.

Assumptions:

The following points cover the significant delivery assumptions related to this project;

No change to scope following Stakeholder sign off – May 2013.
 No requirement to provide physical facilities for the maintenance of any operational vehicles.
 Snowbase and Fire Station to remain operational during construction.
 Replacement of covered parking for business as usual vehicles can be accommodated for in existing buildings.
 Installation of Sweeper Tip Facility and Fire Access Road to Snowbase excluded from scope.
 No changes to forecast numbers of personnel using facility (as at March 2013).
 Current IT provision for ASD to be relocated to new facility.

Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.

Operational Issues

HAL Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
OPEX Reduction	-£280,000	Reduction in operating costs from 2014 (average costs as incremental per annum)
Maintenance	tbc	Removed Maintenance spend of Building 471 (ATS current location).
Assumptions:		
The following points cover the significant operational assumptions related to this project;		
Reduction in FTE for ASD and ATS achieved. Reduction in overtime achieved. Maintenance costs for Building 471 cease.		

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Assumptions:		
The following points cover the significant operational assumptions related to this project;		
No impact on airline Opex for this project.		
Average Asset life:		
Average Asset Life:	20 Years	
Commentary:		
None		
<i>Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.</i>		
Impact on User Charges:		
Estimated Per Passenger Cost Impact:	N/A	
Commentary:		

Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only.

Non Construction Risk:

The following points cover any significant areas of risk for the Airline Community regarding this project.

None.

Annex B: Project Delivery: Cost Information:

Project Information

Project Name: Airside Operational Building
 BCT No.: 10749

Cost Information

Base Costs:	£6,029,383	67	%
On-Cost:	£1,317,400	16	%
Opportunity (included in risk)	£0	0	%
Risk (R1 Allowance Only)	<u>£1,653,218</u>	18	%
Total	£9,000,000	100	%

Commentary:

The project received endorsement from the CIP Working Group in January 2013, and the full £9,000,000 was endorsed.

Cost Benchmark Comparisons:

Project Name:	10749: Airside Operational Building
Total Capital Budget (<i>Constant Prices</i>):	£9,000,000

Guidance Notes:

Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.

Annex C: Project Delivery: High Level Project Plan:

Gateway G2 – May 2013: End of Options (Concept Design) and out to Tender (Design & Build) in June 2013

Gateway G3 – July 2013: Contract awarded for Design & Build

Gateway G4 – Sept 2013: Detailed Design completed

Oct 2013: Start on site

Gateway G5 – Mar 2014: Construction complete

Header Information

BCT No.	10857
Op No.	30582
Project Name:	T3 Additional PCA Infrastructure Project

Project Overview, Objectives and Status

Overview:	
Description:	<p>This project involves the installation of ten pre-conditioned air units (PCA) and hose delivery systems to Terminal 3, Pier 7.</p> <p>The proposed Pier 7, Code 'E' Stands to receive PCA units are 313 to 322.</p> <p>Two Pier 6 Stands are also being investigated for the inclusion of PCA units and hose systems, and these are 309 & 311.</p>
Ref. Drawings / Images: <i>(Refer to Annex A)</i>	Refer to Annex A.
Objectives:	
HAL:	<p>The project will:</p> <ul style="list-style-type: none">Reduce Aircraft's Axillary Power Units (APU's) run timeReduce CO2 emissionsImprove air quality <p>The benefit will begin to be delivered in Spring 2014 as the PCA units come on stream.</p>
Airline:	Create facilities which meet the expectations and requirements of the airlines operating the Pier 7 Stands at Heathrow.

Project Benefits:

The installation of PCA units will reduce the production of nitrogen oxides from the Aircraft's APU's.

Status:

Programme:	Project Gateway Stage:
Capacity Optimisation	G2 - Options

Airline Engagement:

On completion of the Options Stage, the project details will be discussed with the Airlines. Stakeholder consultation has taken place with regards to PCA installation on other T3 piers e.g. Stands 340 & 342

Project Delivery

Current Control Budget:

Total Capital Budget <i>(Estimated At Completion)</i> :	£5,000,000
<i>Refer to Annex B for cost information detail.</i>	

Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
June / 2013	11 / 2013	06 / 2014	07 / 2014

Refer to Annex C for programme information detail.

Assumptions:

The following points cover the significant delivery assumptions related to this project;

There is sufficient power to supply 10 PCA units to pier 7 (The provision of power is currently outside the scope of this project.).
The air bridges are strong enough to support the air hose delivery system.
There is sufficient space at the T3 Stand Head to accommodate the PCA units and additional sub stations.

Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.

Operational Issues

HAL Financial Revenue and Operational Cost (Opex) Impact:

Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Maintenance Charge.	£24,000	New PCA Units.
Metering	£+TBC	Revenue generated from Metering will be determined as the project progresses.

Assumptions:

The following points cover the significant operational assumptions related to this project;

Airline Financial Revenue and Operational Cost (Opex) Impact:

Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Power Consumption	£1,005,900	Charge for power usage
Not using APU	-£2,125,000	Reduced fuel consumption.
Metering	£+TBC	Revenue generated from Metering will be determined as the project progresses.

Assumptions:

The following points cover the significant operational assumptions related to this project;

Once the PCA Units are installed, the airlines will use the PCA units to heat or cool the planes.

Average Asset life:

Average Asset Life: 15 Years

Commentary:

PCA units are currently used at Terminal 3 (Axa), Terminal 4, and Terminal 5 (Jetway), and are proposed for Terminal 2 (Axa).

Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.

Impact on User Charges:

Estimated Per Passenger Cost Impact: | N/A

Commentary:

None.

Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only.

Non Construction Risk:

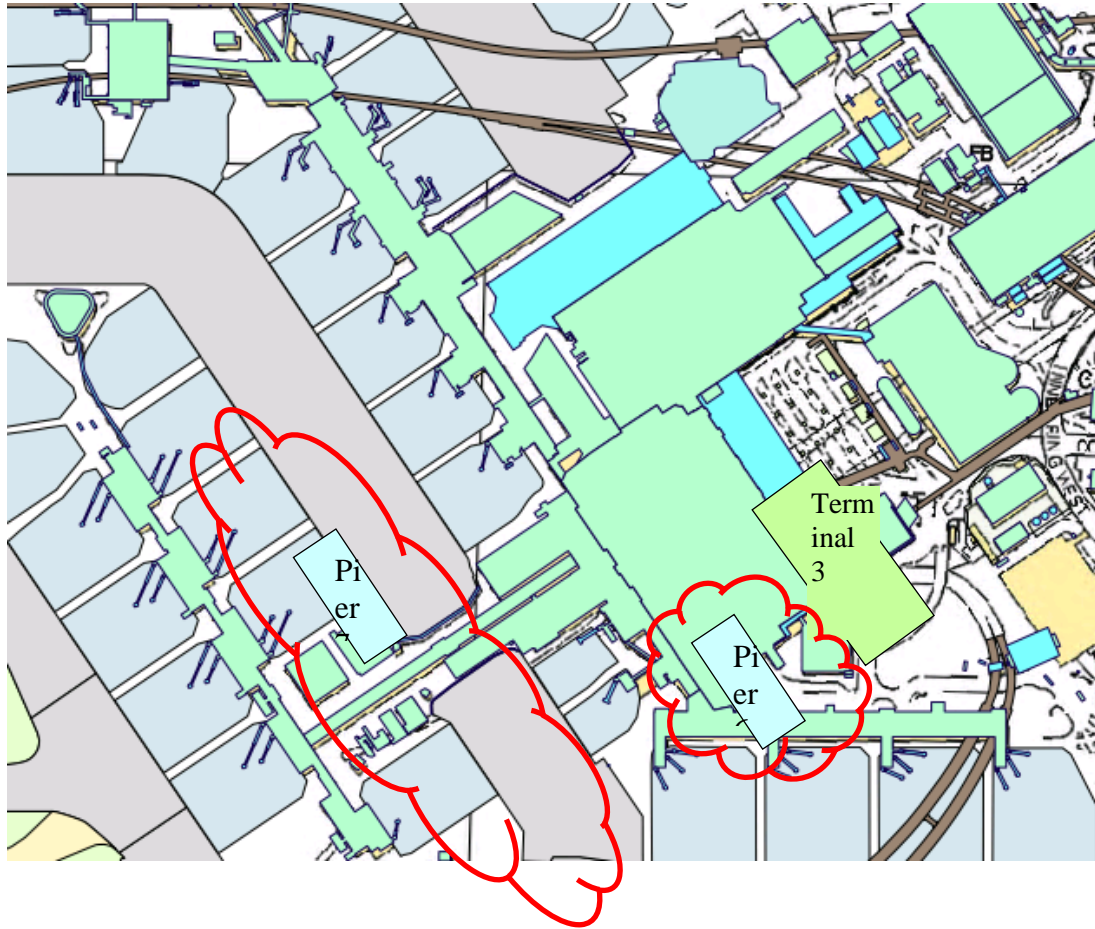
The following points cover any significant areas of risk for the Airline Community regarding this project.

If a new power supply is required, e.g. the introduction of 3 package substations along Pier 7, the project cost and duration will need to be reassessed.

UKPNS can deliver a new HV supply to Pier 7.

Annex A: Overview: Reference Drawing / Image:

Location Terminal 3



Annex B: Project Delivery: Cost Information:

Project Information

Project Name: T3 Additional PCA Infrastructure Project
BCT No.: 10857

Cost Information

All information extracted from March 2013 month end process

Base Costs:	£3,422,784	69	%
On-Cost:	£764,353	15	%
Opportunity	£0	0	%
Risk (R1 Allowance Only)	£812,863	16	%
Total	£5,000,000	100	%

Commentary:

Cost Benchmark Comparisons:	
Project Name:	T3 Additional PCA Infrastructure Project
Total Capital Budget (<i>Constant Prices</i>):	£5,000,000
Guidance Notes:	
The costs have been reviewed against the installation of PCA units on stand 342. The 342 project included general widening of the stand to accommodate A380 aircraft.	
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>	

Header Information

BCT No.	10377
Op No.	25745
Project Name:	T4 Additional Baggage Facility (ABF) 1.75 (Phase 2)

Project Overview, Objectives and Status

Overview:	
Description:	ABF is an existing baggage satellite facility to the west of Terminal 4. In November 2010, a single story extension to ABF was added and this is known as T4 ABF 1.75 (Phase 1). The extension is a temporary scaffolding structure which requires costly monthly maintenance to ensure the structure remains safe. Also the temporary structure does not provide sufficient protection against the elements for the handlers operating in this facility and there is insufficient space to operate the baggage vehicles effectively. T4 ABF 1.75 (Phase 2) will provide a permanent building that removes all of the current issues associated with the temporary structure and on site works began after the Olympic Embargo ended in mid-September 2012.
Ref. Drawings / Images: <i>(Refer to Annex A)</i>	See Annex A
Objectives:	
HAL:	Run Heathrow airport responsibly, safely and securely.
Airline:	Improved flexibility – more than one handler can operate effectively and efficiently out of the permanent building which should lead to improvements on the loading of departing bags.

Project Benefits:

The T4 ABF 1.75 permanent building will deliver a number of benefits:

- Provide a multi-handler facility
- Provide an increased capacity (operational efficiencies from passing lane)
- Can handle four flights simultaneously
- Avoids on-going maintenance of the temporary structure
- Improved facility for handlers and HAL
- Energy consumption (dis-benefit due costs from larger building)

Status:

Programme:	Project Gateway Stage:
Capacity Optimisation	G4 Implement in May 2012

Airline Engagement:

Previous approval at CIP Working Group for sanction of £1.3m in Q5; on-going engagement with handlers; in May, seeking G4 endorsement and approval from Baggage Community / Airlines and T4 Stakeholder Board / Airlines up to total sanction of £5.6m over Q5 and Q5+1.

Project Delivery

Current Control Budget:			
Total Capital Budget (<i>Estimated At Completion</i>):		£5,177,000	
<i>Refer to Annex B for cost information detail.</i>			
Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
05 / 2011	09 / 2012	09 / 2013	10 / 2013
<i>Refer to Annex C for programme information detail.</i>			
Assumptions:			
The following points cover the significant delivery assumptions related to this project;			
Significant night working			
Live operation in the ABF 1.75 facility must be maintained			
Access to the ABF 1.75 facility must be maintained			
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>			

Operational Issues

HAL Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Maintenance	(14.77k)	Maintenance for the manual handling aids
Facilities	(24.40k)	Charges for larger building and electricity for new manual handling aids
Assumptions:		
The following points cover the significant operational assumptions related to this project;		

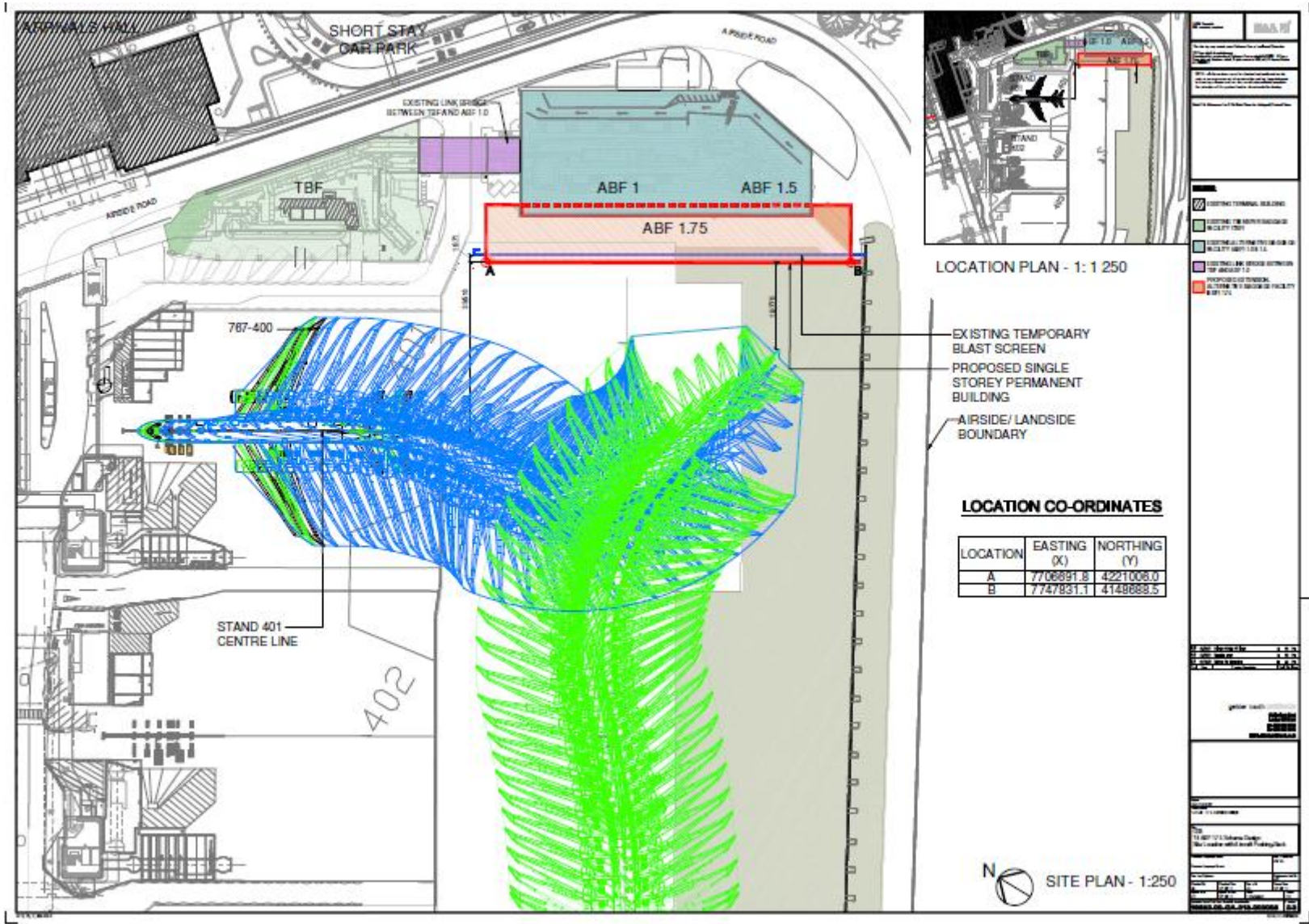
Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Assumptions:		
The following points cover the significant operational assumptions related to this project;		

Average Asset life:	
Average Asset Life:	20 Years
Commentary:	

None.
<i>Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.</i>
Impact on User Charges:
Estimated Per Passenger Cost Impact: 0.5p
Commentary:
None.
<i>Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only.</i>

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project.
None .

Annex A: Overview: Reference Drawing / Image:



Annex B: Project Delivery: Cost Information:

Project Information

Project Name: T4 ABF 1.75 (Phase 2)
BCT No.: 10377

Cost Information

All information extracted from March 2013 month end process

Base Costs:	£4,447,919	86	%
On-Cost:	£655,775	13	%
Opportunity	(£75,694)	-2	%
Risk (R1 Allowance Only)	£149,000	3	%
Total	£5,177,000	100	%

Cost Benchmark Comparisons:	
Project Name:	T4 ABF 1.75 (Phase 2)
Total Capital Budget (<i>Constant Prices</i>):	£5,176,999.83
Guidance Notes: None.	

in Q6; on-going engagement with handlers, BOA, Airlines and T4 Stakeholders. G3 Stakeholder Endorsement form signed in March 2013 by T4 SPB.

Project Delivery

Current Control Budget:			
Total Capital Budget (<i>Estimated At Completion</i>):		£21,342,395	
<i>Refer to Annex B for cost information detail.</i>			
Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
10 / 2011	07 / 2013	10 / 2014	07 / 2014
<i>Refer to Annex C for programme information detail.</i>			
Assumptions:			
The following points cover the significant delivery assumptions related to this project;			
<p>Project Brief Assumptions A380 forecast based on HAL Business Development A380 Forecast from Summer 2012 Modelling assumes Immigration times of 45 minutes for Non-EU passengers, and 15minutes for EU passengers</p> <p>Delivery Assumptions Site boundary definition - assumed project is landside with minor airside working for some dock works, removal of plant from Spelthorne building and steel deliveries. Reuse of existing foundations - it is assumed that Heathrow Airport will take on the risk of retaining the existing foundations Day/night working - it is assumed the project will be executed during the day with some night deliveries only and limited night working only Life safety systems scope undefined - provisional sums assumed (200K as per RK request) Baggage systems IT scope undefined - provisional figures assumed (£200k). Airline office relocation works to be carried out by an LPI contractor Percentage allowances included for Contractor's Overheads and Profit Allowances have been made where insufficient information is available for these items to be costed within the limits of the confidence levels</p>			
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>			

Operational Issues

HAL Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Extra-over cleaning to BRH	£26,750	
Reclaim -1 Major maintenance	£8,000	Cost is £50,000 every 7yrs
Assumptions:		
The following points cover the significant operational assumptions related to this project;		
Replacement of existing, less-efficient, end-of-life M&E plant with new plant, will result in negligible impact on opex costs.		

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Maintenance Resource and Costs	£147,540	Recoverable under Price Per Bag mechanism
Reclaim -1 Heating Rent	£ 17,960	Recoverable under Price Per Bag mechanism
Reclaim -1 Business Rates	£106,430	Recoverable under Price Per Bag mechanism
Reclaim -1 Building Maintenance	£ 88,050	Recoverable under Price Per Bag mechanism
Reclaim -1 Electricity	£ 11,900	Recoverable under Price Per Bag mechanism
Assumptions:		
The following points cover the significant operational assumptions related to this project;		
None.		

Average Asset life:	
Average Asset Life:	25 Years
Commentary:	
None.	
<i>Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.</i>	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	NIL
Commentary:	
None.	
<i>Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only.</i>	

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project.
Key risks are:
Ensuring no downtime of M&E plant during changeover from existing to new.

No unmanageable impact on airside road use during works
Both to be managed by the Contractor.

Annex B: Project Delivery: Cost Information:

Project Information

Project Name: T4 BRH Expansion
BCT No.: 10429

Cost Information

All information extracted from March 2013 month end process

Base Costs:	£17,944,296	84	%
On-Cost:	£2,142,051	10	%
Opportunity	-£417,064	-2	%
Risk (R1 Allowance Only)	£1,673,112	8	%
Total	£21,342,395	100	%

Commentary:
None.

Cost Benchmark Comparisons:	
Project Name:	T4 BRH Expansion
Total Capital Budget (<i>Constant Prices</i>):	£17.9m
Guidance Notes:	
<p>The T4 Baggage Reclaim Hall Expansion project has been benchmarked against the following key elements; Production design and surveys, Steel superstructure, Envelope, M&E, Internal wall finishes, Floor finishes, Baggage belt, carousel & feeds, preliminaries, Overhead & Profit and On-cost.</p> <p>The construction costs are from the G3 URS Scheme design Cost Plan produced by the MSP. The benchmarked elements in this instance represent 38% of the project cost.</p>	
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>	

Annex C: Project Delivery: High Level Project Plan:

Activity ID	Activity Name	OD	RD	% Complete	Start	Finish
Total		855	425		04-Jul-11 A	08-Dec-14
T4 BRH Expansion - Project Schedule		855	425		04-Jul-11 A	08-Dec-14
Milestones		840	425		04-Jul-11 A	05-Dec-14
Gateway Milestones		778	425		19-Oct-11 A	05-Dec-14
GIP5430	Brief Decision (G1)	0	0	100%		19-Oct-11 A
GIP5540	Ready for Cap Op Options Decision (G2)	0	0	100%		17-Apr-12 A
GIP5380	Cap Op Options Decision (G2)	0	0	100%		18-Apr-12 A
GIP5500	BAB Options Decision (G2)	0	0	100%		01-May-12 A
GIP5590	CIP Working Group	0	0	100%		22-Nov-12 A
GIP5510	Gateway 3 (G3)	0	0	0%		25-Mar-13
GIP5400	Cap Op Target Confirmation (G4)	0	0	0%		14-Jun-13
GIP5520	BAB Target Confirmation (G4)	0	0	0%		14-Jun-13
GIP5560	Ready for Cap Op Gateway 4 (G4)	0	0	0%		14-Jun-13
GIP4640	Cap Op Assembly Complete (G5)	0	0	0%		15-Sep-14
GIP4950	BAB Assembly Complete (G5)	0	0	0%		15-Sep-14
GIP5580	Ready for Cap Op Transition (G6)	0	0	0%		14-Oct-14
GIP5420	Cap Op Transition Complete (G6)	0	0	0%		14-Oct-14
GIP5530	BAB Transition Complete (G6)	0	0	0%		14-Oct-14
GIP4770	Cap Op Close Down Complete (G7)	0	0	0%		05-Dec-14
GIP4960	BAB Close Down Complete (G7)	0	0	0%		05-Dec-14
GIP4970	Ready for Cap Op Closedown (G7)	0	0	0%		05-Dec-14

Header Information

BCT No.	10448
Op No.	25767
Project Name:	T5 Track Transit System (TTS) Enhancements

Project Overview, Objectives and Status

Overview:	
Description:	This project will address the overcrowding issue associated with the Terminal 5 Track Transit System (TTS), during the morning long haul arrivals peak. This has negatively impacted the passenger experience and is impacting the operational performance of the TTS. Scope: Fit out of T5C Northern Platform, fit out of all TTS walkways with passenger conveyors and escalators, additional TTS Car, Systems Enhancements study, platform enhancements.
Ref. Drawings / Images: <i>(Refer to Annex A)</i>	None.
Objectives:	
HAL:	This project will improve the passenger experience in the morning peak by: Improving service levels by reducing wait times, platform congestion and reliability
Airline:	This project will improve the passenger experience and remove the operational stand constraints for the morning hour.
Project Benefits:	
Improve the passenger experience on the TTS Increase the capacity of the TTS during the peak hour by 36% Increase the capacity of the TTS outside of the peak hour by 9%	
Status:	
Programme:	Project Gateway Stage:
Airport Resilience	Definition

Airline Engagement:

G2 Gateway – T5 Stakeholder Board February 2012
 CIP Working Group – 26th January 2012 (Trigger / Q5, Q5+1 and Q6 monies approved)
 Triggers Working Group 14th February 2012
 CAA approved creation of the new trigger 1st March 2012
 G3 Gateway – T5 Stakeholder Board April 2012
 G4 Gateway – T5 Stakeholder Board February 2013

Project Delivery

Current Control Budget:	
Total Capital Budget <i>(Estimated At Completion):</i>	£33,206,921
<i>Refer to Annex B for cost information detail.</i>	
Schedule:	

Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
-	04/2013	08/2014	03/2014

Refer to Annex C for programme information detail.

Assumptions:

The following points cover the significant delivery assumptions related to this project;

The tunnels have been designed for infrequent one directional flow.

During walkway construction a pedestrian route must be maintained in all walkways.

The demand was based on the 2017 schedule.

Following a review of the schedule and actual arrival statistics demand was based on 8 BA long-haul arrivals in 15 minutes.

TTS capacity is based on 80 passengers per car in the morning peak.

Not every passenger has to board the first train.

Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.

Operational Issues

HAL Financial Revenue and Operational Cost (Opex) Impact:

Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Cleaning	+£231,000	Additional cleaning costs due to the additional LEPC, new northern platform and upgrade of the walkways from contingency to front of house areas.
Maintenance	+£71,000	Additional maintenance costs associated with the installation of new LEPC and TTS vehicle.

Assumptions:

The following points cover the significant operational assumptions related to this project;

13 passenger conveyors are installed into the walkways.

3 lifts into the T5C Northern Platform.

2 Double bank 22m rise escalators installed in the T5C Northern Platform.

6 x 6m rise escalators installed in the walkways.

There are no REVEX opportunities on this project

Airline Financial Revenue and Operational Cost (Opex) Impact:

Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:

Assumptions:

The following points cover the significant operational assumptions related to this project;

Following consultation with the airlines at the T5 Stakeholder Board in February 2012 it was confirmed by the airlines that there would be no impact on airline Opex for this project.

Average Asset life:

Average Asset Life:	20 Years
Commentary:	
None	
<i>Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.</i>	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	3.2p
Commentary:	
None	
<i>Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only.</i>	
Non Construction Risk:	
The following points cover any significant areas of risk for the Airline Community regarding this project.	
None	

Annex B: Project Delivery: Cost Information:

Project Information

Project Name: T5 TTS Enhancements
BCT No.: 10448

Cost Information

Base Costs:	£27,765,068	84	%
On-Cost:	£3,648,796	11	%
Opportunity Risk	£(980,031)	-3	%
	£2,773,088	8	%
Total	£33,206,921	100	%

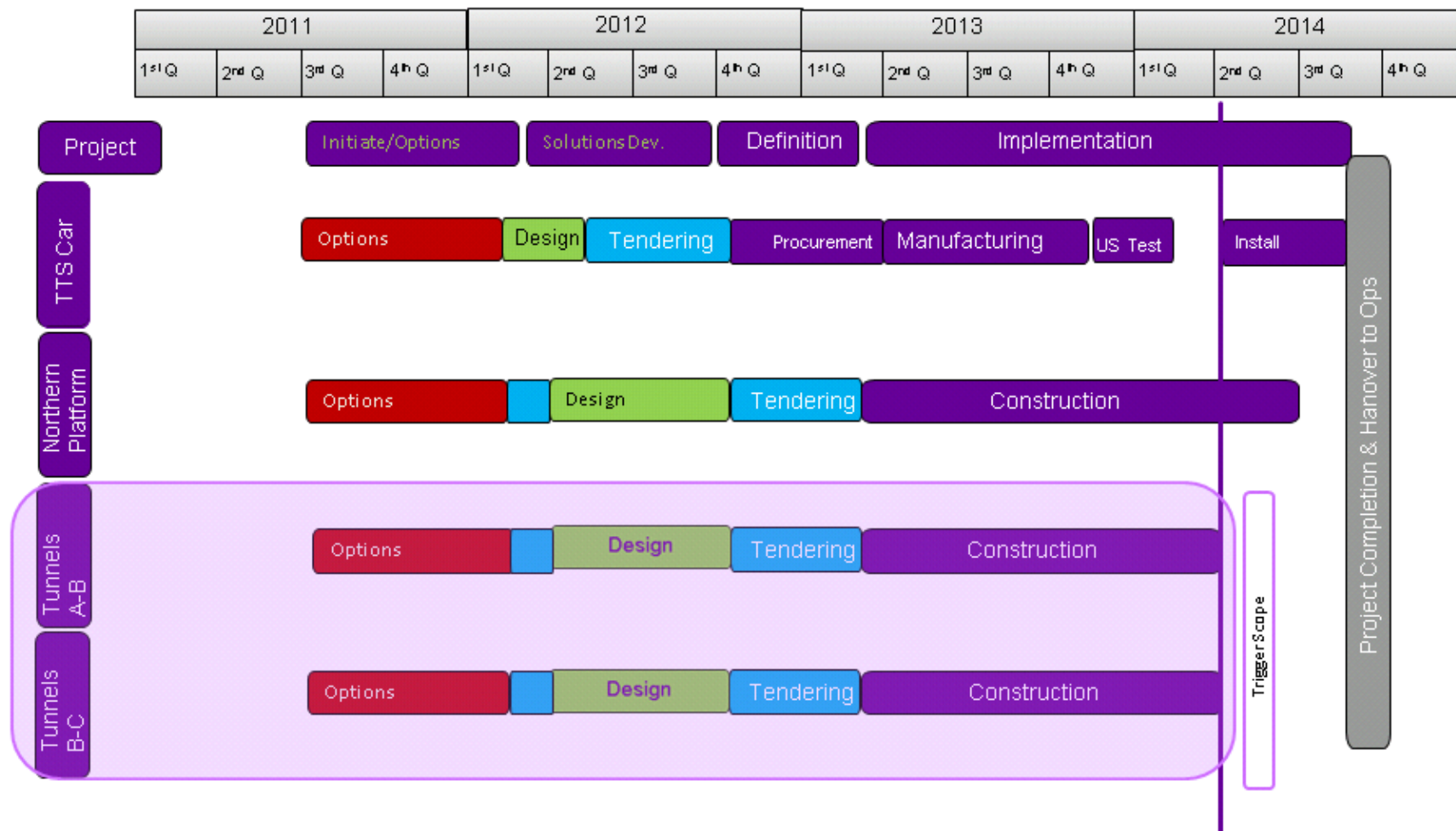
Commentary:

The project received endorsement from the CIP Working Group on 26th January 2012 and the full £35,897,143 was endorsed.

Cost Benchmark Comparisons:	
Project Name:	10448 : T5 TTS Enhancements
Total Capital Budget (<i>Constant Prices</i>):	£37,897,000
Guidance Notes:	
85% of the cost plan for Gateway 4 has been benchmarked against other live and historical projects. The project has also been competitively tendered to ensure the best value for money.	
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>	

Annex C: Project Delivery: High Level Project Plan:

T5 TTS Project Schedule



Header Information

BCT No.	10495
Op No.	25786
Project Name:	Stands Infrastructure - 4 th FEGP

Project Overview, Objectives and Status

Overview:	
Description:	<p>Fixed Electrical Ground Power (FEGP) configuration of 3no 90kVA connections are not compatible with the A380 and therefore, 4no 90kVA connections are required. This situation has been temporarily resolved by the use of a mobile Ground Power Units (GPUs). However, one of the planning conditions of T5 is that sufficient FEGP be provided for normal operations.</p> <p>The 4th FEGP scope of work is the first part of a programme of works to upgrade and resolve Infrastructure issues on the stands across the LHR: The project will provide a 4th 90kVA connection for each existing Code F stand.</p> <p>The works involve the following: Conduct a trial of a 4th connection to fully understand the power demands during an operational turnaround of an A380. Provide a 4th FEGP connection on each A380 stand (28No. in total). Provide a 4-cable carrier to replace existing 3-cable carrier on each stand (27No. in total).</p> <p>Further scope has now been added to this project to included solutions for FEGP and PCA provision for B787 aircraft.</p>
Ref. Drawings / Images:	Annex A shows the drawing of all Code F stands which will have 4th FEGP plugs installed
Objectives:	
HAL:	<p>This project will: Create facilities that meet the expectations and requirements of the airlines operating the A380 from Heathrow. Reduce CO2 emissions. Meet the 'no mobile GPU' planning requirement for T5.</p> <p>The benefit will start to be delivered mid 2012 as the existing A380 fleet begin to use the upgraded FEGP stands. After this initial roll out of 4th connections, the benefits will be realised as other carriers introduce their A380s to Heathrow – For T4 this will be in Summer 2012 and for T5 it will be in the autumn of 2012.</p>
Airline:	<p>Create facilities that meet the expectations and requirements of the airlines operating the A380 from Heathrow. Reduced number of faults reported from the A380 rejecting</p>

	the supply.
Status:	
Programme:	Project Gateway Stage:
Capacity Optimisation	Implementation G4

Airline Engagement:

Stakeholder consultation has taken place with the A380 airlines:
The Stakeholders that have a high influence on the project and are most affected by the project are the present A380 operators QF, SQ and EK and Heathrow operations.
The solution proposed has been accepted by all parties and endorsed at the Airside approvals board 15th March 2012.

Project Delivery

Current Control Budget:			
Total Capital Budget (<i>Estimated At Completion</i>):			£4,260,746
<i>Refer to Annex B for cost information detail.</i>			
Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
04/2012	05/2012	5/2013	Per installation (27No.)
Assumptions:			
The following points cover the significant delivery assumptions related to this project:			
Schedule above reflects scope of Code F 4th FEGP installation works only. B787 scope to be defined)			
The stands will be available on the dates identified in the schedule once agreed by airside			
Works to be suspended at peak times – weekends and holidays.			
Works carried out overnight.			
Stands 340 & 342 are delivered within the stands projects.			
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>			

Operational Issues

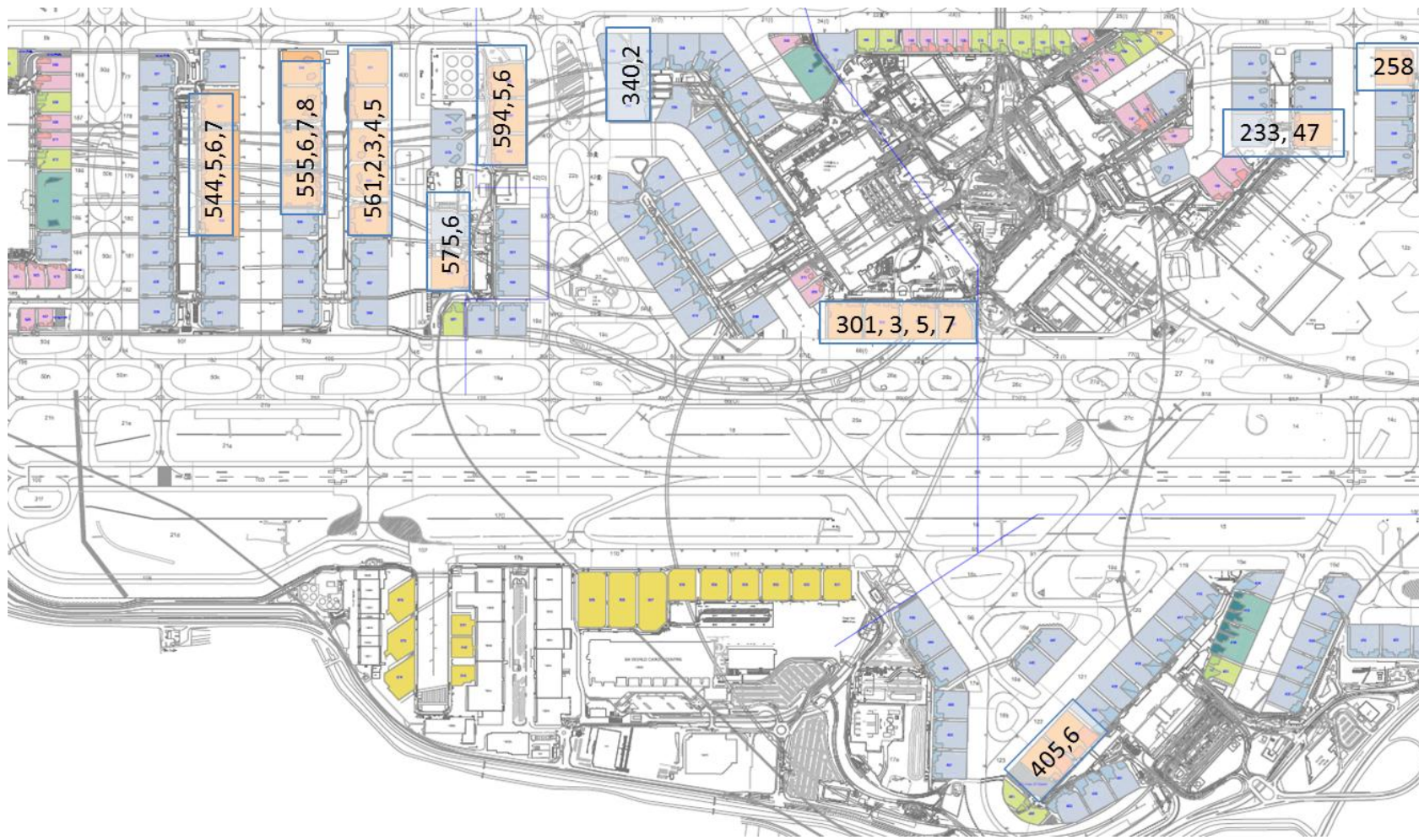
HAL Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
		There is no change to the impact of the current revenue or new revenue generated as a result of this project.
N/A	N/A	None
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
None		

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary: No additional Opex costs should be incurred by this solution.
N/A	N/A	No impact
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
Works carried out over night		
Delivery in a live terminal		

Average Asset life:	
Average Asset Life:	Quad unit - 15 years
Commentary:	
Units the same as those currently in use at Heathrow except they have 4 cables instead of 3 cables.	
<i>Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.</i>	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	N/A
Commentary:	
None	
<i>Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only (see Section 5.3 for further details)</i>	

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project:
There are no dependencies on the project/programme outside the control of the project. Schedule interfaces are in accordance with the stand allocations accepted by the airlines and airside. Should these need to be altered, there is enough flexibility within the schedule delivery to accommodate any changes.

Annex A : Code F stands which will have a 4th FEGP plugs installed



Annex B: Project Delivery: Cost Information:

Project Information

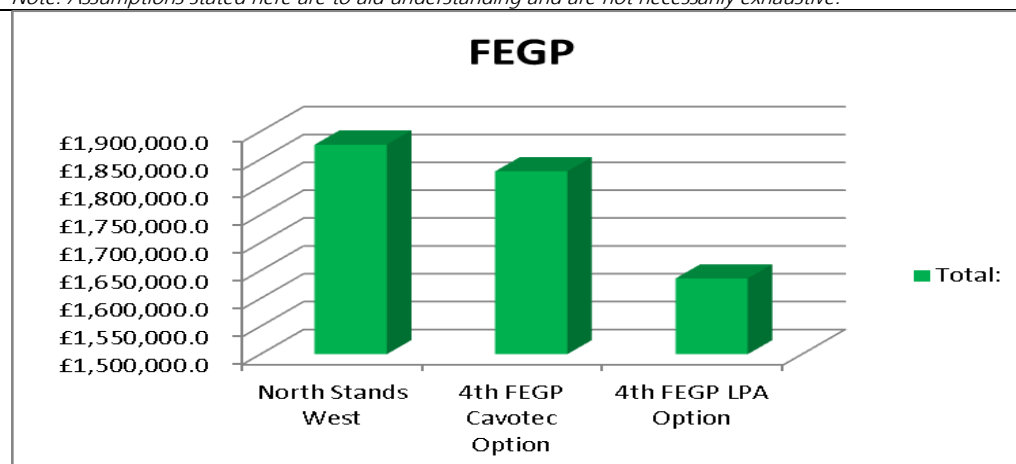
Project Name: Stands Infrastructure – 4th FEGP
 BCT No.: 10495

Cost Information

All information extracted from March 2013 month end

Base Costs:	£3,542,531	83%
Oncost	£575,465	13%
Opportunity:	(£-5,200)	0%
Risk:	£147,950	4%
Total	£4,260,746	100%

Cost Benchmark Comparisons:	
Project Name:	Stands Infrastructure – 4 th FEGP
Total Capital Budget (<i>Nominal Prices</i>):	£9,260,750
Guidance Notes:	
Of the £9,260,750, the EAC for the 4th FEGP plug is the only element that has currently been benchmarked. The scope of the B787 work has yet to be defined.	
The benchmark comparison is between the Midfield Pier North Stands West project and the two quotations given by AXA for the Cavitec Quad cable and LPA Quad cable. It has been broken down into the FEGP, Quad cable and total price of these two.	
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>	



AXA provided two options for the quad carriers. Option A is the 24m Cavotec Quad carrier which is the most expensive out of the two, option B is the 24m LPA Quad carrier. There is a saving for every unit that adds up to £178,971.66 for 27 units required for the project. The quote given by AXA is being benchmarked against the Midfield Pier North Stands West project. This quote was given in the first quarter of 2011 and therefore the prices had to be converted to the first quarter of 2012.

As shown in the graph and table above the prices for the north stands project are above the quotes by AXA for both options, although for option A. there is not much difference compared to option B which has a larger difference. HAL and BA have accepted the Option B to be the more sustainable and viable under H&S conditions as the Cavotec unit weighs substantially more than the LPA unit. This option also secures value for money due to the saving of 179k shown as comparison with the costs on Midfield Pier North Stands West project.

Project	North Stands West	4th FEGP Cavotec Option	4th FEGP LPA Option
Total:	£1,876,329	£1,828,385	£1,636,156
FEGP:	£536,094	£491,173	£491,173
Quad carrier:	£1,340,235	£1,337,212	£1,144,983

Header Information

Project Name:	T3 Pier 5 Capacity Phase 2-3		
References:	BCT No:	10682	OP: 30137

Project Overview, Objectives and Status

Overview:	
Description:	To enable best use of stands for code F aircraft and to refurbish pier 5 gate rooms and link bridges. Provision of three additional air bridges Enabling works, including foundations FIDS Gate room alteration to accommodate airbridges New stand markings
Ref. Drawings / Images: <i>(Refer to Annex A)</i>	Annex A
Objectives:	
HAL:	Deliver the Business Plan Operational Improvements Passenger Experience
Airline:	Win Support for Airport Vision Succeed via Airline Success
Project Benefits:	
Increased capacity – stand and gate room; to accommodate code F aircraft	
Status:	
Programme	Project Gateway Stage
Capacity Optimisation	G2- Solutions Development
Airline Engagement:	
Infrastructure stakeholder board	

Project Delivery

Cost:			
Total Capital Expenditure <i>(Constant Prices)</i> :			£11,545,508
Schedule:			
Brief Decision	Start on Site	Completion on Site	Operational Use Commences
Jan12	Aug 13	July 14	July
Assumptions:			
The following points cover the significant delivery assumptions related to this project;			
Taxiways and lanes can accommodate A380 Stands and airbridges can be closed for installation Out of hours working will occur Some aircraft will still be able to use the stand during installation Existing structure can accommodate change			

Operational Issues

HAL Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
£15,000 pa	-	Additional APBB's installed on stand
Assumptions:		
The following points cover the significant operational assumptions related to this project;		
None		

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
-	£14,800 to £15,900 per rotation	Additional A380 rotation at LHR will provide aeronautical charge increase.
Assumptions:		
The following points cover the significant operational assumptions related to this project;		
Range based on anticipated airline development and taken as best – worst case to give the range.		

Average Asset life:	
Average Asset Life:	25 Years
Commentary:	
None.	
<i>Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.</i>	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	0.1p
Commentary:	
None.	
<i>Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only.</i>	

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project.
None.

Annex B: Project Delivery: Cost Information:

Project Information

Project Name: T3 Pier 5 Capacity Phase 2 - 3
BCT No.: 10682

Cost Information

All information extracted from March 2013 month end process

Base Costs:	£8,720,465	76	%
On-Cost:	£1,313,894	11	%
Opportunity	(£-767,565)	-7	%
Risk (incl. inflation = £279,842)	£2,278,714	20	%
Total	£11,545,508	100	%

Commentary:
None.

Cost Benchmark Comparisons:	
Project Name:	T3 Pier 5 Capacity Phase 2-3
Total Capital Budget (<i>Constant Prices</i>):	£12,000,000
Guidance Notes:	
None.	
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>	

Header Information

BCT No.	10802
Op No.	TBC
Project Name:	Loading Bay Enhancements – T3 & T4

Project Overview, Objectives and Status

Overview:	
Description:	Enhancing the loading bay.
Ref. Drawings / Images: <i>(Refer to Annex A)</i>	
Objectives:	
HAL:	Run our airport responsibly, safely and securely.
Airline:	Maximising commercial impact to have a positive impact on airline charges.

Project Benefits:
This project will deliver a number of benefits: Reduction in health & safety incidents. Improved operational efficiency for deliveries and retail business partners. Increased VIP passenger satisfaction due to enhanced T4 external environment.

Status:	
Programme:	Project Gateway Stage:
Capacity Optimisation	G0 / G1 Initiate as at March 2013

Airline Engagement:
EAC £5m included on the CIP Working Group Approval list: £1.5m in Q5, £3.5m in Q6

Project Delivery

Current Control Budget:			
Total Capital Budget (<i>Estimated At Completion</i>):		£4,820,000	
<i>Refer to Annex B for cost information detail.</i>			
Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
04 / 2013	11 / 2013	10 / 2014	On-going
<i>Refer to Annex C for programme information detail.</i>			
Assumptions:			
The following points cover the significant delivery assumptions related to this project;			
Significant night working.			
Live retail operation in the terminal must be maintained.			
Access to the loading bays must be maintained.			
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>			

Operational Issues

HAL Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Maintenance	TBC	Maintenance for traffic management controls and new improved lighting
Facilities	TBC	Charges for operating new equipment installed by this project
Assumptions:		
The following points cover the significant operational assumptions related to this project;		
TBC		

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Assumptions:		
The following points cover the significant operational assumptions related to this project;		
TBC		

Average Asset life:	
Average Asset Life:	20 Years
Commentary:	
None	
<i>Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.</i>	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	0.4p
Commentary:	
None.	
<i>Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only.</i>	
Non Construction Risk:	
The following points cover any significant areas of risk for the Airline Community regarding this project.	
None	

Annex B: Project Delivery: Cost Information:

Project Information

Project Name: Loading Bay Enhancements – T3 & T4
BCT No.: 10802

Cost Information

All information extracted from March 2013 month end process

Base Costs:	£3,500,000	73	%
On-Cost:	£500,000	10	%
Opportunity	£1,000,000	21	%
Risk (R1 Allowance Only)	<u>-£180,000</u>	-4	%
Total EAC	£4,820,000	100	%

Commentary:

A detailed cost plan will be prepared as part of the Options Stage work.

Cost Benchmark Comparisons:	
Project Name:	Loading Bay Enhancements – T3 & T4
Total Capital Budget (<i>Constant Prices</i>):	£5,000,000
Guidance Notes:	
Benchmark information will be provided during the Options Stage work.	
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>	

Appendix E: Portfolio of Projects

3353	Major Fire Appliance Replacement
4185	VIP Infrastructure
3809	Runway Rehabilitations Project
6793	Heathrow Storm Water Catchment
7718	Eastern Maintenance Base Re-development
9301	Tunnels Refurbishment
9843	Low Cost Security Projects
8857	Taxiway / CDS Rebuilds (Q5)
10806	Core Electrical Distribution Upgrades
10797	AGL Control System
10796	Heathrow Sweeper Tip Facility
10668	CO2 Energy Demand Management
10625	Terminal 3 Roof Refurbishment
10678	Q5 Portfolio of Projects Development

Activity ID	Activity Name	Remaining Duration	Start	Finish	2013					2014					2015													
					A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	
Portfolio of Projects		1031	02-Apr-13	06-Jun-17																								
Design & Procure		341	02-Apr-13	14-Aug-14																								
Design & Procure		341	02-Apr-13	14-Aug-14																								
04185-A	VIP Infrastructure design to end of production design	112	02-Apr-13	09-Sep-13																								
06793-A	Heathrow Storm Water Foul Solution design	205	01-Aug-13*	04-Jun-14																								
06793-B	Heathrow Storm Water Storage Solution design	205	01-Aug-13*	04-Jun-14																								
07718-A	EMB - Eastchurch Rd diversion design	101	02-Apr-13	22-Aug-13																								
08857-A	Taxiway / CDS rebuilds design	44	02-Apr-13	04-Jun-13																								
09301-A	T1- T3 tunnels refurb design	341	02-Apr-13	14-Aug-14																								
09301-B	Main and Cargo Tunnel Refurb design	126	02-Apr-13	27-Sep-13																								
10625-A	T3 Roof repair	57	02-Apr-13	21-Jun-13																								
10668-A	CO2 Energy Demand design	43	02-Apr-13	03-Jun-13																								
10678-A	Q5 Portfolio of Projects Development - Trolley Replacement/Renewable Energy/AQ monitor	245	02-Apr-13	27-Mar-14																								
10796-A	Sweeper Tip Airside design	87	02-Apr-13	02-Aug-13																								
10796-B	Sweeper Tip Landside design	155	15-Apr-13*	21-Nov-13																								
10797-A	AGL Control System - existing design	176	02-Apr-13	06-Dec-13																								
10806-A	Core electrical distribution upgrades - car park lighting design	89	02-Apr-13	06-Aug-13																								
10806-B	Core electrical distribution upgrades - pier 4A FEGP design	110	02-Apr-13	05-Sep-13																								
Implement		1031	02-Apr-13	06-Jun-17																								
Runways Rehabilitation		396	02-Apr-13	31-Oct-14																								
03809-C	Southern Runway & RETs	206	02-Apr-13*	31-Jan-14																								
03809-F	Northern Runway (Q6 BC01)	170	03-Mar-14*	31-Oct-14																								
Heathrow Storm Water Catchment		420	02-Apr-13	04-Dec-14																								
06793-D	Aerator	180	02-Apr-13	12-Dec-13																								
06793-E	RIM	70	02-Apr-13*	10-Jul-13																								
06793-F	Foul Solution	130	05-Jun-14	04-Dec-14																								
06793-G	Storage Solution	130	05-Jun-14	04-Dec-14																								
06793-H	De-iceant recovery	41	02-Apr-13	30-May-13																								
06793-J	Security	33	02-Apr-13	17-May-13																								
Tunnels Refurbishment		1031	02-Apr-13	06-Jun-17																								
09301-D	Main Tunnel Production design	185	30-Sep-13	03-Jul-14																								
09301-E	Cargo Tunnel Production design	185	30-Sep-13	03-Jul-14																								
09301-F	Tunnels High Priority Works	225	02-Apr-13	27-Feb-14																								
09301-H	Main tunnel refurb.(Q6 BC31)	712	04-Jul-14	24-May-17																								
09301-J	Cargo tunnel refurb.(Q6 BC31)	720	04-Jul-14	06-Jun-17																								
Other		289	02-Apr-13	03-Jun-14																								
03353-B	Major Fire Appliance Replacement	63	02-Apr-13	02-Jul-13																								
07718-E	EMB A380 Access	40	02-Apr-13	30-May-13																								
08857-B	Taxiway / CDS Rebuilds	189	05-Jun-13	11-Mar-14																								
09843-B	Low cost security projects	164	02-Apr-13	20-Nov-13																								
10625-B	T3 Roof Works	125	24-Jun-13	16-Dec-13																								
10668-B	CO2 Energy Demand	246	02-Apr-13	28-Mar-14																								
10678-C	AQ monitor replacement	45	27-Jan-14*	28-Mar-14																								
10796-C	Sweeper Tip Airside	105	05-Aug-13	13-Jan-14																								
10796-D	Sweeper Tip Landside	125	21-Nov-13	03-Jun-14																								
10797-C	AGL Control System - existing	71	09-Dec-13	31-Mar-14																								
10806-C	Core electrical distribution upgrades - car park lighting	157	07-Aug-13	28-Mar-14																								
10806-D	Core electrical distribution upgrades - pier 4A FEGP	136	06-Sep-13	28-Mar-14																								

Implementation
 Sub Project Impl.
 Design
 Implementation
 Transition
 Milestone

Header Information

BCT No.	3353
Op No.	24092
Project Name:	Major Fire Appliance Replacement

Project Overview, Objectives and Status

Overview:	
Description:	Replacement of HAL Major Fire Tenders
Ref. Drawings / Images:	None
Objectives:	
HAL:	To maintain safety and statutory fire coverage compliance
Airline:	As per HAL

Project Benefits:	
This project will provide Heathrow with the vehicles required to maintain the airports mandated fire cover. The new vehicles will ensure a reliable up to date fleet, using the latest technology for now and the foreseeable future.	

Status:	
Programme:	Project Gateway Stage:
Portfolio of Projects	Construction Decision Gate 4 – Gate 5

Airline Engagement:	
This project was presented to the Infrastructure Stakeholder Board in March 2011 and February 2013.	

Project Delivery

Current Control Budget:			
Total Capital Budget (<i>Estimated At Completion</i>):		Q5 : £6,018,256	
<i>Refer to annex B for cost information detail.</i>			
Schedule:			
Construction Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
03/2011	N/A	N/A	2012
Assumptions:			
The following points cover the significant delivery assumptions related to this project:			
This project will purchase 8 major fire tenders for Heathrow Airport. 5 will be standard vehicles and 3 will have high reach extended turret system (HRET). 3 standard vehicles and 1 HRET vehicle were delivered in 2012, with the remainder due for delivery in 2013.			
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>			

Operational Issues

HAL Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Unknown	N/A	The new fleet will have an initial positive impact on maintenance costs which will erode over time as the fleet ages.
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
None		

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
		None
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
None		

Average Asset life:	
Average Asset Life:	10 Years
Commentary:	
None	
<i>Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.</i>	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	None
Commentary:	
N/A	
<i>Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only (see Section 5.3 for further details)</i>	

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project:
None

Annex B: Project Delivery: Cost Information:

Project Information

Project Name: Major fire Appliance Replacement
BCT No.: 3353

Cost Information

All information extracted from March 2013 month end process

Base Costs:	£5,985,402	98	%
On-Cost:	£95,854	2	%
Opportunity	£0	0	%
Risk	£0	0	%
Total	£6,081,256	100	%

Commentary:
None.

Cost Benchmark Comparisons:	
Project Name:	Major Fire Appliance Replacement
Total Capital Budget (<i>Nominal Prices</i>):	£6,081,256
Guidance Notes:	
Formal benchmarking data is not available for this product. Value for Money was gained through the procurement process, as this project was competitively tendered through OJEU.	
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>	

Header Information

BCT No.	4185
Op No.	24231
Project Name:	VIP Infrastructure

Project Overview, Objectives and Status

Overview:	
Description:	This project was established to understand the VIP Strategy for Heathrow as there were a number of projects being carried out which impacted the current VIP suites. In addition to this there were some DfT issues with the VIP process, which needed to be addressed.
Ref. Drawings / Images:	None
Objectives:	
HAL:	The VIP Service needs to meet the following objectives: Security – provide long term security compliance and provide opportunities in infrastructure to react to future security changes. Financial – Reduce operational costs and underutilised resource through improved facilities at optimum locations. Provide additional revenue opportunities through exploiting spare capacity Service – create a world class VIP product with modern and efficient facilities. Sustainability – Ensure the VIP programme aligns with Heathrow’s growth.
Airline:	The VIP service must provide: Security; Competitive equivalence; Consistently high quality service to customers; and, Modern and efficient facilities.

Project Benefits:

The project benefits are aligned to the objectives of robust security, reduction in opex, and to increase opportunities for revenue from the VIP product.

Status:

Programme:	Project Gateway Stage:
Portfolio of Projects	Options Development Gate1 - Gate 2

Airline Engagement:

Primary airline engagement for the VIP project has been and continues to be through the Airline VIP Working Group. Wider consultation will also continue to be done through the Infrastructure Stakeholder Board.

Project Delivery

Current Control Budget:			
Total Capital Budget (<i>Estimated At Completion</i>):		Q5 : £5,555,151	
<i>Refer to annex B for cost information detail.</i>			
Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
11/2010	TBA	TBA	TBA
Assumptions:			
The following points cover the significant delivery assumptions related to this project:			
The project scope has been and will continue to be designed to cater for the expected peak VIP passenger demand.			
The original concept for the re-development of Heathrow's VIP infrastructure is aligned with the philosophy expected by the Heathrow Airline Community. The original concept provided each Terminal with a dedicated VIP infrastructure. Delivery of the original concept would lead to the Windsor Suite (during normal operations) being dedicated to Terminal 5.			
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>			

Operational Issues

Heathrow Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
PAX/HBS Security in CTA	-£1,000,000	Additional manned post created. Full impact of project yet to be assessed.
PAX/HBS Security in T4	-£1,000,000	Additional manned post created full impact of project yet to be assessed.
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
None.		

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
		Not know at this stage due to the uncertainty of scope.
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
None.		

Average Asset life:	
Average Asset Life:	10 years systems / 25 years buildings
Commentary:	
None.	
<i>Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.</i>	

Impact on User Charges:	
Estimated Per Passenger Cost Impact:	None.
Commentary:	
None.	
<i>Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only (see Section 5.3 for further details)</i>	

Non Construction Risk:	
The following points cover any significant areas of risk for the Airline Community regarding this project:	
None.	

Annex B: Project Delivery: Cost Information:

Project Information

Project Name: VIP Infrastructure
 BCT No.: 4185

Cost Information

All information extracted from March 2013 month end process

Base Costs:	£4,339,423	78	%
On-Cost:	£1,000,437	18	%
Opportunity Risk	(£218,538)	-4	%
	£433,828	8	%
Total	£5,555,151	100	%

Commentary:

Cost Benchmark Comparisons:	
Project Name:	VIP Infrastructure
Total Capital Budget (<i>Constant Prices</i>):	£5,555,151
Guidance Notes:	
Benchmarking information will be provided at the completion of the Solutions Development stage when a clearer understanding of the scope required will be known.	
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>	

Header Information

BCT No.	3809
Op No.	25764
Project Name:	Runway Rehabilitations Project

Project Overview, Objectives and Status

Overview:	
Description:	This project will design and deliver a refurbished Southern runway, providing a further 10 year design life before the next major maintenance, to ensure business as usual continues for the airfield operation. The refurbishment will include: Removal and replacement of the existing surface course, grooved to standard, and paint markings reapplied. Upgrade of aeronautical ground lighting to LED, and cable replacement. Construction of 3 new Rapid Exit Taxiways (RET).
Ref. Drawings / Images: <i>(Refer to Annex A)</i>	Scope overview drawing
Objectives:	
HAL:	Rehabilitate the Southern Runways to provide a 10 year life. Construct 3 RET's to improve airfield resilience.
Airline:	As per HAL.

Project Benefits:

The rehabilitation works will ensure business as usual. However, as a result of the refurbishment works, unplanned maintenance costs will reduce over the early years post project completion prior to ramping up again. The introduction of LED Aerodrome Ground Lighting (AGL) will reduce energy costs and maintenance costs over the longer term.

Status:

Programme:	Project Gateway Stage:
Portfolio of Projects	Construction Decision Gate 4 – October 2012

Airline Engagement:

The airlines have been and will continue to be consulted through the Infrastructure Stakeholder Board, the PRB and any other stakeholder engagement will take place as required.

Project Delivery

Current Control Budget:			
Total Capital Budget (<i>Estimated At Completion</i>):		Q5 : £34,649,180	
<i>Refer to annex B for cost information detail.</i>			
Schedule:			
G4 Gateway:	Start on Site:	Completion on Site:	Operational Use Commences:
Oct 2012	Nov 2012	Nov 2013	Staged
<i>Refer to annex C for programme information detail.</i>			
Assumptions:			
The following points cover the significant delivery assumptions related to this project;			
The Northern Runway scope to be injected into this project which is not currently in the project EAC shown above.			
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>			

Operational Issues

HAL Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Engineering	£300k	Savings associated with LED upgrade to lighting system. Final numbers to be validated.
Assumptions:		
The following points cover the significant operational assumptions related to this project;		
None.		

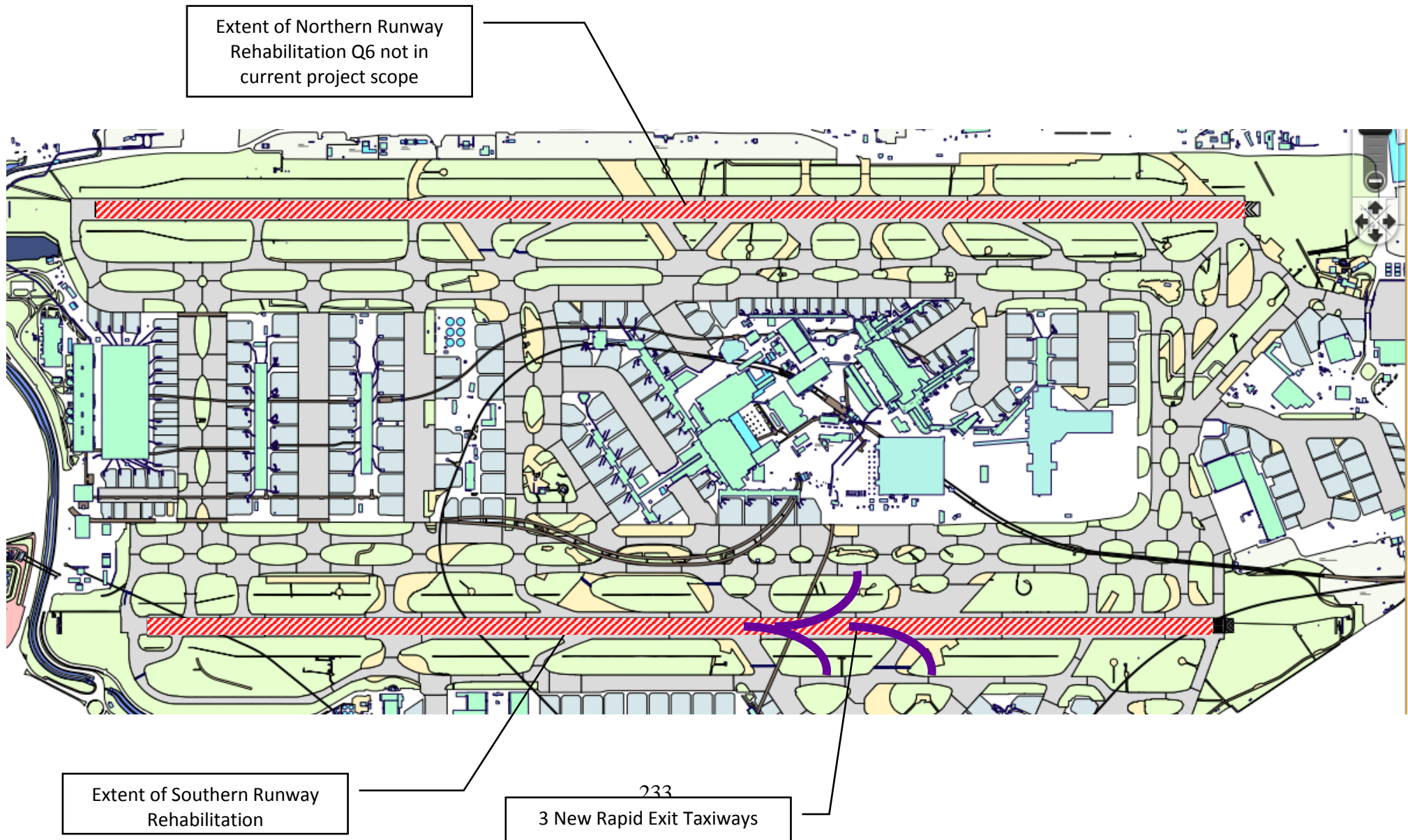
Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
		None.
Assumptions:		
The following points cover the significant operational assumptions related to this project;		
None.		

Average Asset life:	
Average Asset Life:	10 years for Runway Resurfacing. 30 years for the RET's.
Commentary:	
None	
<i>Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.</i>	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	None.
Commentary:	

None.
<i>Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only.</i>

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project.
There is a risk of operational disruption related to the late hand back of the runway following night-time possession.

Annex A: Overview: Reference Drawing / Image:



Annex B: Project Delivery: Cost Information:

Project Information

Project Name: Runway Rehabilitations Project
BCT No.: 3809

Cost Information

All information extracted from March 2013 month end process

Base Costs:	£27,958,670	81	%
On-Cost:	£4,259,268	12	%
Opportunity	£0	0	%
Risk	£2,431,242	7	%
Total	£34,649,180	100	%

Commentary:

Cost Benchmark Comparisons	
Project Name:	Runway Rehabilitations Project
Total Capital Budget (Constant Prices):	£34,649,180
Guidance Notes:	
The two largest elements of the project are the Marshall asphalt and preliminaries, againsts similar projects undertaken at a variety of different airports these elements benchmark within acceptable ranges as displayed below.	
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>	

Header Information

BCT No.	6793
OP No.	24157
Project Name:	Heathrow Storm Water Catchment

Project Overview, Objectives and Status

Overview:	
Description:	This project is to improve the Heathrow storm water and Pollution Control System (PCS) to address : Current flooding capacity issues. Current failures of the PCS, and a requirement from the Environment Agency (EA) for an "Improvement Plan" to achieve revised discharge consents. The Improvement Plan has been developed with the EA throughout 2011 and 2012 in 6 previously agreed stages (each requiring approval to continue). The EA endorsed the principles of the Plan in March 2013.
Ref. Drawings / Images:	Annex A - Overall schematic of the PCS.
Objectives:	
HAL:	Compliance - Ensure compliance with environmental regulations. Prevention - Improve upstream management controls to prevent pollution moving down stream. Clean Up - Reduce historic contamination where it may present a threat to water quality. Flood Prevention & Water Level Management- Manage water flows and levels to minimise risk of flooding.
Airline:	As per HAL.

Project Benefits

Reduction in unplanned operational expenditure. Reduced risk of future prosecution by EA. Improved Heathrow's reputation in support of the "Case for Growth".

Status:

Programme:	Project Gateway Stage:
Portfolio of Projects	Various

Airline Engagement:

The airlines have been and will continue to be consulted through the Infrastructure Stakeholder Board.

Project Delivery

Current Control Budget:			
Total Capital Budget <i>(Estimated At Completion):</i>		Q5 : £17,490,873	
<i>Refer to annex B for cost information detail.</i>			
Schedule:			
Project Stage	Start on Site:	Completion on Site:	Operational Use Commences:
Instrumentation Resilience	Started	07/2013	Winter 2013
Security Improvements Phase 1	02/2013	09/2013	05/2013
Security Improvements Phase 2	07/2013	09/2013	10/2013
Foul Solution : Early Works - PCS Valves	08/2013	09/2013	Winter 2013
Assumptions:			
The following points cover the significant delivery assumptions related to this project:			
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>			

Operational Issues

HAL Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Opex	TBA	The expectation is that the end solution will increase operational costs however in doing so this will be offset by the elimination of the unplanned operational costs that are being incurred today.
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
None		

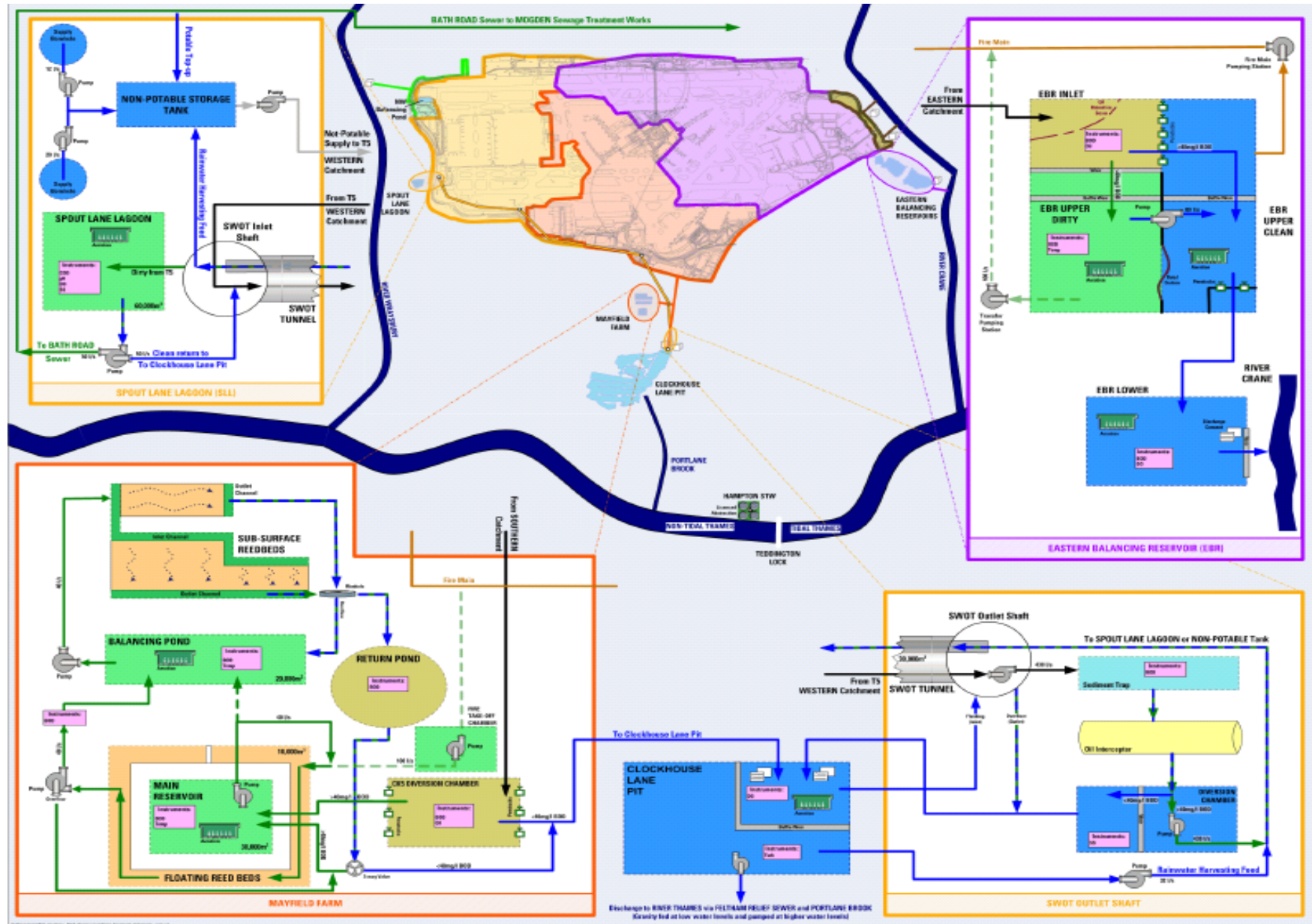
Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
		None
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
None		

Average Asset life:	
Average Asset Life:	15 years
Commentary:	
The average life is for a number of assets being delivered in different locations.	
<i>Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.</i>	

Impact on User Charges:	
Estimated Per Passenger Cost Impact:	1.9p
Commentary:	
None	
<i>Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only (see Section 5.3 for further details)</i>	

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project:
None

Annex A: Overview: Reference Drawing / Image:



Annex B: Project Delivery: Cost Information:

Project Information

Project Name: Heathrow Storm Water Catchment
BCT No.: 6793

Cost Information

All information extracted from March 2013 month end process

Base Costs:	£14,851,737	85	%
On-Cost:	£2,108,907	12	%
Opportunity	-£647,630	-4	%
Risk	£1,177,859	7	%
Total	£17,490,873	100	%

Cost Benchmark Comparisons:	
Project Name:	Heathrow Storm Water Catchment
Total Capital Budget (<i>Nominal Prices</i>):	£17,490,873
Guidance Notes:	
For each work stream in this project, benchmarking information will be provided at the appropriate stage. To date, the project has delivered equipment to measure and improve the water quality through oxygenation (aerators). Aerator costs have been benchmarked by way of comparison with various water treatment projects. The majority of measurement equipment compares favourably with existing similar installations however some equipment is more specialised, and here benchmarking has been limited.	
<i>Note: Assumptions stated here re to aid understanding and are not necessarily exhaustive.</i>	

Header Information

BCT No.	7718
Op No.	23923
Project Name:	Eastern Maintenance Base Redevelopment

Project Overview, Objectives and Status

Overview:	
Description:	<p>This project aims to redevelop the Eastern Maintenance Base to align with Eastern Maintenance Base Masterplan and support the delivery of the wider Eastern Campus Masterplan. The project will be executed through a number of works streams summarised as follows:</p> <p>WS 1 – East Church Road Diversion WS 2 – Ancillary Relocations WS 3 – Replacement Hangar WS 4 – A380 Access WS 5 – Taxiway Relocations</p>
Ref. Drawings / Images: <i>(Refer to Annex A)</i>	As the previous Eastern Maintenance Base Masterplan Option 7a is no longer supported, the development of a new Eastern Maintenance Base Masterplan is currently work in progress, and no drawings have been provided.
Objectives:	
HAL:	<p>Strategic Growth – Enabling terminal & pier served stands to support Heathrow’s growth, through the efficient use of land within the airport boundary.</p> <p>Increase operational functionality and resilience through the reconfiguration of access points to both runways.</p>
Airline:	Enable the earliest opportunity for releasing the T2C land assembly. Support future proposed maintenance & fleet operations and create the opportunity for consolidation of operations.
Project Benefits:	
The scope of this project is a key enabler to the delivery of a T2C satellite. Delivery of a T2C satellite would provide additional capacity for Heathrow.	
Status:	
Programme:	Project Gateway Stage:
Portfolio of Projects	Various
Airline Engagement:	
Regular Consultation has been and will continue to be undertaken through the Infrastructure Stakeholder Board and in the past through a specially formed T2C Land Assembly Working.	

Project Delivery

Current Control Budget:			
Total Capital Budget (<i>Estimated At Completion</i>):		Q5 : £6,179,693	Q6 : £22,347,058
		Total : £28,526,751	
<i>Refer to Annex B for cost information detail.</i>			
Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
Aug 2008	Various	Various	Staged
<i>Refer to Annex C for programme information detail.</i>			
Assumptions:			
The following points cover the significant delivery assumptions related to this project;			
WS 4 is currently being delivered and will be completed in Q5.			
WS1 production design is completed and is currently on hold subject to the outcome of Eastern Maintenance Base Masterplanning work and therefore is now shown in Annex C.			
WS 2, 3, & 5 are also on hold subject to the outcome of Eastern Maintenance Base Masterplanning work and therefore they are also not shown in annex C.			
Work not delivered in Q5 and will be deferred to Q7.			
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>			

Operational Issues

HAL Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
TBA	TBA	To be assessed
Assumptions:		
The following points cover the significant operational assumptions related to this project;		
None		

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
TBA	TBA	To be assessed
Assumptions:		
The following points cover the significant operational assumptions related to this project;		
None		
Average Asset life:		
Average Asset Life:	10-50yrs	

Commentary:	
The average life is for a number of assets being delivered in different locations.	
<i>Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.</i>	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	TBA
Commentary:	
None	
<i>Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only.</i>	

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project.
None

Annex B: Project Delivery: Cost Information:

Project Information

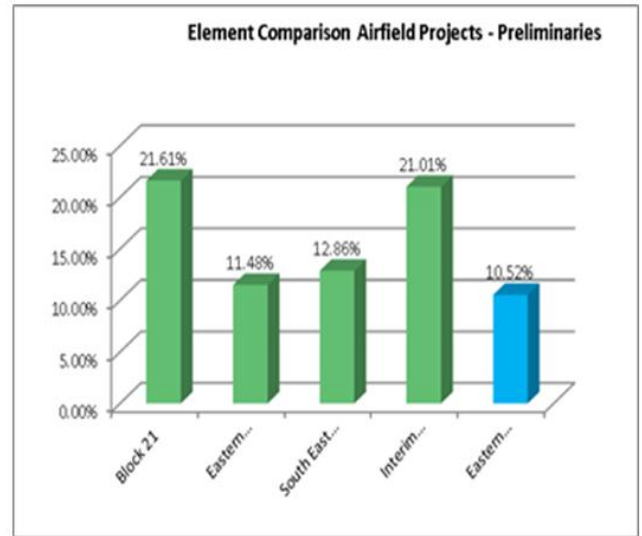
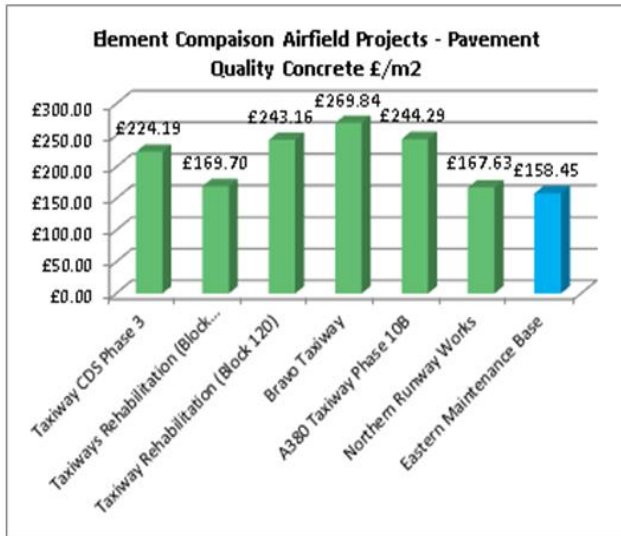
Project Name: Eastern Maintenance Base Redevelopment
 BCT No.: 7718

Cost Information

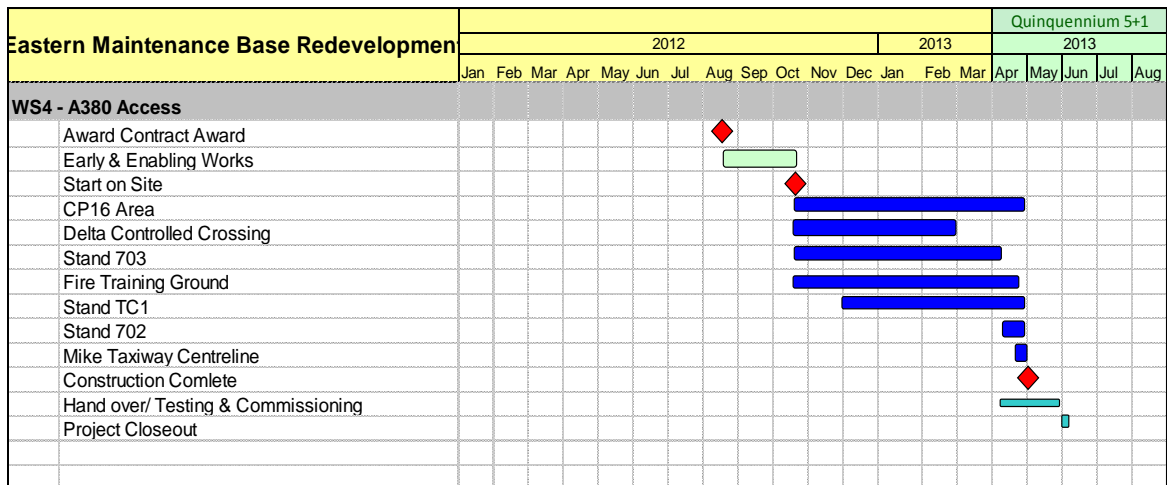
All information extracted from March 2013 month end process

Base Costs:	£23,239,387	81	%
On-Cost:	£2,934,942	10	%
Risk	£2,352,422	9	%
Total	£28,526,750	100	%

Cost Benchmark Comparisons:	
Project Name:	Eastern Maintenance Base Redevelopment
Total Capital Budget (<i>Constant Prices</i>):	£28,526,751
Guidance Notes:	
The EMB Mike Taxiway works have been benchmarked by way of comparison with various projects against the key elements of 'Pavement quality concrete' and 'Preliminaries' which form the majority of the project costs. The cost analysis of this benchmarking exercise appears favourable to other comparable projects.	
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>	



Annex C: Project Delivery: High Level Project Plan for Active Workstreams:



Header Information

BCT No.	9301
Op No.	24506
Project Name:	Tunnels Refurbishment

Project Overview, Objectives and Status

Overview:	
Description:	Refurbishment of the Main Tunnel, Cargo Tunnel, T1 Service Tunnel and T3 Service Tunnel to re-life critical operational links and reduce life safety & business continuity risks to a level of As Low As Reasonably Practicable (ALARP) and meet legislative requirements. In high-level terms the works will incorporate: Ventilation upgrade Fixed fire suppression installed Passive fire protection Evacuation and communications systems Upgrading M&E facilities
Ref. Drawings / Images:	Annex A – Main and Cargo Tunnel location plans
Objectives:	
HAL:	The primary objective is to reduce risk to life to ALARP. The secondary objective suitably reduces business continuity risk for both the tunnels and the runways that sit above them. Additionally for the Main Tunnel only, there is an objective to create an improved first impression for passengers arriving or departing from Heathrow.
Airline:	As per HAL
Project Benefits:	
Improve the performance and resilience of critical operational routes. Reduce the life safety and business risks associated with operating the main and cargo tunnels.	
Status:	
Programme:	Project Gateway Stage:
Portfolio of Projects	Various
Airline Engagement:	
The airlines have been and will continue to be consulted through the Infrastructure Stakeholder Programme Board.	

Project Delivery

Current Control Budget:			
Total Capital Budget (<i>Estimated At Completion</i>):		Q5 : £24,379,027 Q6 : £140,010,530 Total : 164,389,557	
<i>Refer to annex B for cost information detail.</i>			
Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
HPW	Aug-12	Nov-13	Maintained throughout the

			project.
Main Works	Dec-13	Jun-17	Maintained throughout the project.

Assumptions:

The following points cover the significant delivery assumptions related to this project:

Only the Main, Cargo and T1 + T3 Service tunnels are being refurbished
Construction works can only be carried out at night for both the Main and Cargo tunnels due to the need to maintain tunnel operations. The Cargo tunnel additionally subject the runway alternation restrictions
The current Q6 budget for this project is supported by Q6 Business Case 131. This Business Cases are assumed to be endorsed as part of the final Q6 settlement to support the funding required to complete this project.

Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.

Operational Issues

HAL Financial Revenue and Operational Cost (Opex) Impact:

Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Revenue	None	No revenue increase.
Opex	TBA	There will be some operational expenditure impact as new systems are being introduced with a new maintenance regime, this is currently being reviewed.

Assumptions:

The following points cover the significant operational assumptions related to this project:

None.

Airline Financial Revenue and Operational Cost (Opex) Impact:

Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
		TBC.

Assumptions:

The following points cover the significant operational assumptions related to this project:

None

Average Asset life:

Average Asset Life: 25-50 Years

Commentary:

Assets of varying life spans are being delivered as part of this project.

Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.

Impact on User Charges:

Estimated Per Passenger Cost Impact: TBC

Commentary:

None.

Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only (see Section 5.3 for further details)

Non Construction Risk:

The following points cover any significant areas of risk for the Airline Community regarding this project:

There is a risk of operational disruption related to the late hand back of either the Main or Cargo Tunnels following night-time possession.

Annex A: Overview: Reference Drawing / Image:

Main tunnel location plan



Cargo tunnel location plan



Annex B: Project Delivery: Cost Information:

Project Information

Project Name: Tunnels Refurbishment
BCT No.: 9301

Cost Information

All information extracted from March 2013 month end process

Base Costs:	£131,269,455	80	%
On-Cost:	£18,082,851	11	%
Opportunity Risk	-£1,880,000	-1	%
	£16,917,250	10	%
Total	£164,389,557	100	%

Cost Benchmark Comparisons:	
Project Name:	Tunnels Refurbishment
Total Capital Budget (<i>Constant Prices</i>):	£ 164,389,557
Guidance Notes:	
Benchmarking information for the main works will be provided pre Gate 4 Construction Decision when accurate comparisons can be made with OJEU compliant bids for the scope of work.	
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>	

Header Information

BCT No.	9843
Op No.	25148
Project Name:	Low Cost Security Projects (LCSP)

Project Overview, Objectives and Status

Overview:	
Description:	The LCSP portfolio contains a large number of small, low cost security compliance-led projects, managed together through a Local Projects Integrator in order to maximise efficiency and speed of delivery. It is designed to pre-empt and / or react to a deficiency notice from the DfT and therefore must be delivered to the required standard and in a timely manner.
Ref. Drawings / Images:	None.
Objectives:	
HAL:	The scope of work is defined by the need to respond quickly to ever changing security regulations and to prevent / respond to the issue of any DfT Deficiency Notices, Enforcement Notices or an Article 15 notice, which would jeopardise the continued smooth and secure operation of Heathrow airport.
Airline:	As per HAL
Project Benefits:	
Aids the delivery of a safe, compliant and secure airport.	
Status:	
Programme:	Project Gateway Stage:
Portfolio of Projects	Various
Airline Engagement:	
Approval gained March 2009	

Project Delivery

Current Control Budget:			
Total Capital Budget (<i>Estimated At Completion</i>):		Q5 : £7,720,559	
<i>Refer to annex B for cost information detail.</i>			
Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
N/A	N/A	N/A	Various
Assumptions:			
The following points cover the significant delivery assumptions related to this project:			
Low Cost Security Projects is administered through a separate defined governance route. The governance team meet on a monthly basis to ensure that the requested projects are correctly identified, scoped and relate to the improvement of security, in particular compliance, at Heathrow.			
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>			

Operational Issues

HAL Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Security	Variable	Variable dependent upon project scope
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
None		

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
N/A	N/A	None
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
None		

Average Asset life:	
Average Asset Life:	Variable
Commentary:	
Variable dependent upon project scope	
<i>Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.</i>	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	N/A
Commentary:	
None	
<i>Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only</i>	

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project:
None

Annex B: Project Delivery: Cost Information:

Project Information

Project Name: Low Cost Security Projects
BCT No.: 9843

Cost Information

All information extracted from March 2013 month end

Base Costs:	£6,712,122	86	%
On-Cost:	£1,008,437	14	%
Risk	£0	0	%
Total	£7,720,559	100	%

Cost Benchmark Comparisons:	
Project Name:	Low cost Security Projects
Total Capital Budget (<i>Nominal Prices</i>):	£7,720,559
Guidance Notes:	
No benchmarking has been completed at this stage.	
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>	

Header Information

BCT No.	8857
Op No.	24092
Project Name:	Taxiway / Cul-de Sac DS Rebuilds (Q5)

Project Overview, Objectives and Status

Overview:	
Description:	This project will rebuild and rehabilitate areas of the existing airfield (taxiways, cul-de-sac's, stands and tug road) that will reach the end of their operational life during the course of Q5. These works will be carried out in phases throughout Q5.
Ref. Drawings / Images:	None
Objectives:	
HAL:	Refurbishment of key airfield assets to minimise operational disruption from unplanned maintenance and/or potential unavailability.
Airline:	As per HAL.
Project Benefits:	
This project will contribute to maintaining Heathrow's arrivals and take off punctuality by reducing the potential for taxiway or stand closures due to unplanned maintenance.	
Status:	
Programme:	Project Gateway Stage:
Portfolio of Projects	Various
Airline Engagement:	
The airlines have been and will continue to be consulted through the Infrastructure Stakeholder Board.	

Project Delivery

Current Control Budget:			
Total Capital Budget (<i>Estimated At Completion</i>):		Q5 : £26,322,916	
<i>Refer to annex B for cost information detail.</i>			
Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
10/ 2008	03/ 2009	11/ 2013 (B115)	12/ 2011
Note: Completion date reflects completion of the final phase Block 115.			
Assumptions:			
The following points cover the significant delivery assumptions related to this project:			
This project is refurbishing assets on a like for like basis.			
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>			

Operational Issues

HAL Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
None	None	The refurbishment works eliminate the requirement for unplanned maintenance.
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
This project responds to an annual condition survey of the airfield. The work is taking place in response to the survey. The works are then prioritised and tailored to fit the remaining budget.		
Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
N/A	N/A	None available
Assumptions:		
The following points cover the significant operational assumptions related to this project;		
None		
Average Asset life:		
Average Asset Life:	30 Years	
Commentary:		
None		
<i>Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.</i>		
Impact on User Charges:		
Estimated Per Passenger Cost Impact:	2.6p	
Commentary:		
None		
<i>Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only (see Section 5.3 for further details)</i>		
Non Construction Risk:		
The following points cover any significant areas of risk for the Airline Community regarding this project:		
None		

Annex B: Project Delivery: Cost Information:

Project Information

Project Name: Taxiway / CDS Rebuilds (Q5)
BCT No.: 8857

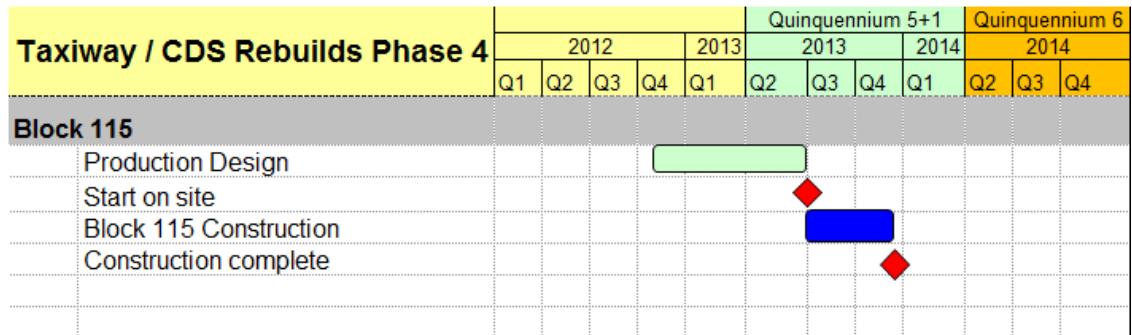
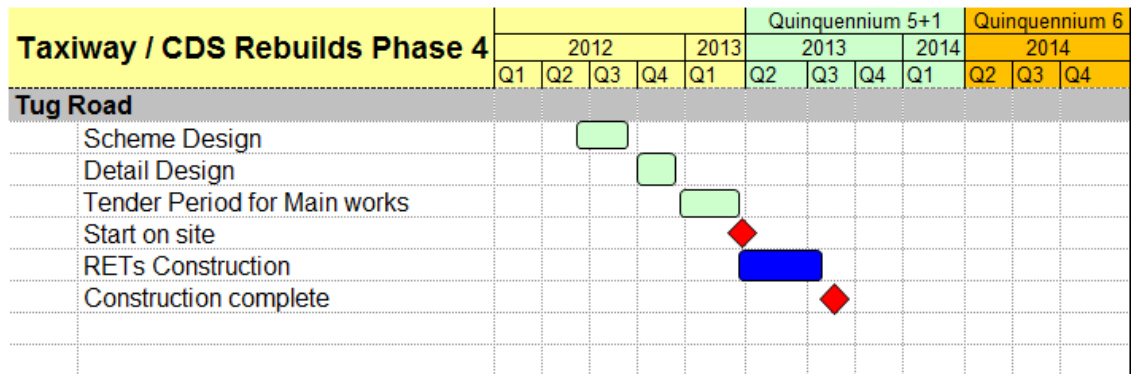
Cost Information

All information extracted from March 2013 month end process

Base Costs:	£22,916,710	87	%
On-Cost:	£3,126,475	12	%
Opportunity	-£242,194	-1	%
Risk	£521,925	2	%
Total	£26,322,916	100	%

Cost Benchmark Comparisons:	
Project Name:	Taxiway and CDS Rebuilds (Q5)
Total Capital Budget (<i>Nominal Prices</i>):	£26,322,916
Guidance Notes:	
The entire scope of this project except for Block 115, which has not reached Gate 4 at this stage (Construction Decision), has been benchmarked and compares favourably with similar past projects.	
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>	

Annex C: Project Delivery: High Level Project Plan:



Header Information

BCT No.	10806
Op No.	30320
Project Name:	Core Electrical Distribution Upgrades

Project Overview, Objectives and Status

Overview:	
Description:	This project consists of 3 separate and independent work streams – Pier 4A Fixed Electrical Ground Power (FEGP), Car Park Lighting, and enabling works for the Schneider Transformer Replacement Programme.
Ref. Drawings / Images: <i>(Refer to Annex A)</i>	None.
Objectives:	
HAL:	<p>The Pier 4A FEGP sub project aims to increase FEGP reliability by addressing the issues with the FEGP system in order to provide the following benefits:</p> <ul style="list-style-type: none">Reduced risk of failing the 99% SQR FEGP availability target and incurring rebate costs;Reduced airfield noise and emissions (less use of APUs)Reduced power cost;Improved customer (airline) satisfaction; and,Reduced maintenance costs. <p>The Car Park Lighting Upgrades sub project aims to address current issues leading to the following business benefits:</p> <ul style="list-style-type: none">Reduced health and safety risks;Reduced operational and maintenance cost; and.Improved public and staff (including airline staff) perception of car park spaces resulting from improved lighting levels.
Airline:	As per HAL

Project Benefits:

As per the objectives above, an improved HAL reputation, and a reduction in unplanned OPEX. Increasing FEGP reliability supports Departures Code of Practice to reduce fuel burn, CO2 emissions, NOx emissions, and noise levels on the ground.

Status:	
Programme:	Project Gateway Stage:
Portfolio of Projects	Options Development Gate 1 – Gate 2

Airline Engagement:
The airlines have been and will continue to be consulted through the Infrastructure Stakeholder Programme Board.

Project Delivery

Current Control Budget:			
Total Capital Budget (<i>Estimated At Completion</i>):		Q5 : £7,043,251	
<i>Refer to Annex B for cost information detail.</i>			
Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
01 / 2013	08 / 2013	03 / 2014	Maintained throughout the project
<i>Refer to Annex C for programme information detail.</i>			
Assumptions:			
The following points cover the significant delivery assumptions related to this project;			
Key assumptions for FEGP are that an affordable solution can be found to increase the electrical power supply resilience to the FEGP stands fed by the 6Kv link.			
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>			

Operational Issues

HAL Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Revenue	None	No revenue impact is expected.
Maintenance Opex costs will reduce	TBC	Operational cost reduction through improved reliability of Pier 4A FEGP motor generator sets. Requirement to patch and repair lighting distributions removed by renewing infrastructure.
Assumptions:		
The following points cover the significant operational assumptions related to this project;		
None		
Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:

Aircraft fuel burn	TBA	Reduced use of main engines, GPU's & air conditioning trucks and APU's once the FEGP is reliable. Reduction in fuel burn & CO2 for 8no stands
Assumptions:		
The following points cover the significant operational assumptions related to this project;		
None		
Average Asset life:		
Average Asset Life:	20 Years	
Commentary:		
The average life is for a number of assets being delivered in different locations. The T1 element of this projects scope will be designed and implemented in line with T1 redevelopment timescales		
<i>Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.</i>		
Impact on User Charges:		
Estimated Per Passenger Cost Impact:	TBC	
Commentary:		
None.		
<i>Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only.</i>		
Non Construction Risk:		
The following points cover any significant areas of risk for the Airline Community regarding this project.		
None.		

Annex B: Project Delivery: Cost Information:

Project Information

Project Name: Core Electrical Distribution Upgrades
BCT No.: 10806

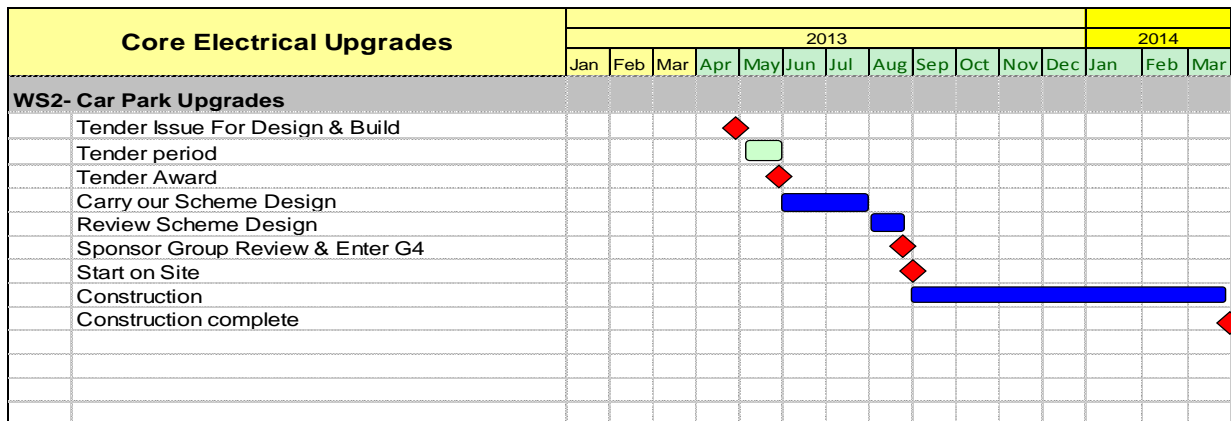
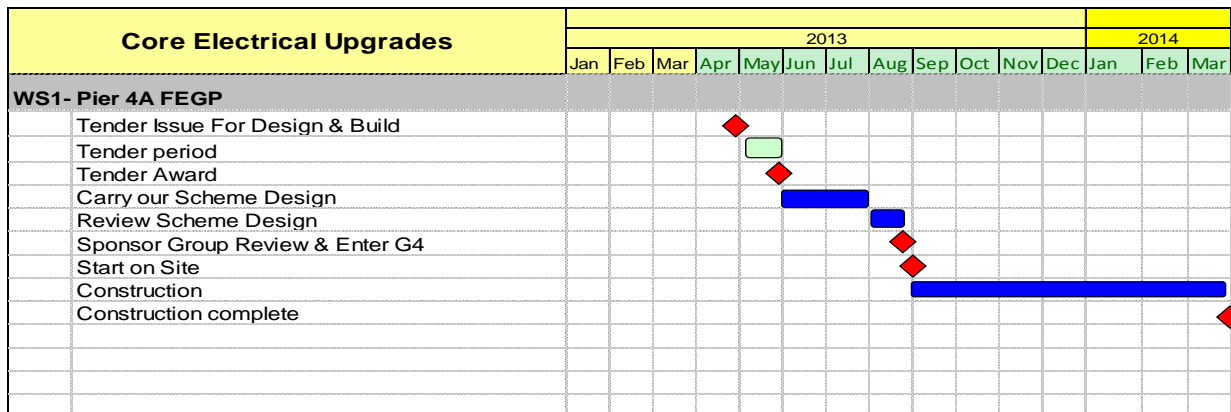
Cost Information

All information extracted from March 2013 month end process

Base Costs:	£5,498,702	78	%
On-Cost:	£908,847	13	%
Opportunity	(£956,749)	-14	%
Risk	£1,592,450	23	%
Total	£7,043,251	100	%

Cost Benchmark Comparisons:	
Project Name:	Core Electrical Distribution Upgrades
Total Capital Budget (<i>Constant Prices</i>):	£7,043,251
Guidance Notes:	
Benchmarking information will be provided at the completion of the Solutions Development Stage when a clearer understanding of scope will be available.	
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>	

Annex C: Project Delivery: High Level Project Plan:



Header Information

BCT No.	10678
Op No.	TBA
Project Name:	Q5 Portfolio of Projects Development

Project Overview, Objectives and Status

Overview:	
Description:	Replacement of Trolleys in T1, T3, T4 and new Trolleys in T2
Ref. Drawings / Images:	None
Objectives:	
HAL:	Improve passenger experience through brilliant basics and to that ensure our equipment and facilities work when passengers need them to.
Airline:	As per HAL.

Project Benefits:

This project will provide Heathrow T1, T3, T4 and T2, with a fleet of trolleys fit for purpose. The new trolleys will ensure a reliable, up to date fleet, for use in the Operations. It will improve service, ambience and trolley availability.

Status:

Programme:	Project Gateway Stage:
Portfolio of Projects	Brief - G0

Airline Engagement:

The project was presented to the CIP Working Group in February 2013 who endorsed the Q5+1 drawdown and change from Intellectual to Delivery (P) status to proceed and deliver the project.

Project Delivery

Current Control Budget:

Total Capital Budget (*Estimated At Completion*): Q5: £4,400,000

Schedule:

Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
04 / 2013	NA	NA	11 / 2013

Assumptions:

The following points cover the significant delivery assumptions related to this project;

The Trolley Working Group is currently defining the trolley specification, phasing and total trolley numbers. Early forecasts show that less than 15,000 trolleys will be required. Consideration is being given to phasing as T1 closes and T2 opens. T2 requires the first batch of trolleys by November 2013.

Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.

Operational Issues

HAL Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
		Not yet assessed as at Gateway 1
Assumptions:		
The following points cover the significant operational assumptions related to this project;		
Assumes Passenger Services support the introduction of the new trolley.		
Maintenance of the new trolleys is being considered as part of this project and is expected to be the same or less than current Operational costs.		
The size of the Passenger Services team is not expected to change.		

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
None	None	None
Assumptions:		
The following points cover the significant operational assumptions related to this project;		
None		

Average Asset life:	
Average Asset Life:	8 Years
Commentary:	
The asset life may vary slightly depending on the specific trolley selected in the tender process.	
<i>Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.</i>	
Impact on User Charges: None	
Estimated Per Passenger Cost Impact:	None.
Commentary:	
None.	

Non Construction Risk:
None

Annex B: Project Delivery: Cost Information:

Project Information

Project Name: Q5 Portfolio of Projects Development
BCT No.: 10678

Cost Information

All information extracted from March 2013 month end process

Base Costs:	£4,400,000	0	%
On-Cost:	£0	0	%
Opportunity	£0	0	%
Risk (R1 Allowance Only)	£0	0	%
Total	£4,400,000	100	%

Commentary:

No On-Costs are expected to be charged against this project.

The trolley project is for £3.8m. The remaining budget in this project is for two other small procurement projects in the Portfolio of Projects Programme.

Cost Benchmark Comparisons:	
Project Name:	Q5 Portfolio of Projects Development
Total Capital Budget (<i>Constant Prices</i>):	£4,400,000
Guidance Notes:	
Benchmarking will be completed at the appropriate stage of the project process.	
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>	

Appendix F: Programme Identification

10792	Q6 Design Allowance
10472	Post Q5 Solutions D&D Studies
7720	T2A Phase 2

Header Information

BCT No.	10792
Op No.	30048
Project Name:	Q6 Design Studies (G0 – G3)

Project Overview, Objectives and Status

Overview:	
Description:	Q6 design studies shall support the progression of Q6 business case solutions through the Heathrow gateway process, ultimately to Gateway 3.
Ref. Drawings / Images:	None.
Objectives:	
HAL:	Q6 design shall support the progression of Q6 business case solutions through the Heathrow gateway process, ultimately to gateway 3, enabling incorporation of early learning into the final Business Plan, the delivery of Business Plan commitments, and the creation of an appropriate delivery schedule to minimise operational disruption.
Airline:	As per HAL.

Project Benefits:

Each Q6 design study will further develop the brief of the lead plan business case in question, enabling further solution refinement through the options and solutions development phases of the Heathrow gateway process. This design activity is being undertaken in advance of Q6 to support the aspiration of projects being 'shovel ready' on day one of the quinquennium.

Status:

Programme:	Project Gateway Stage:
Programme Identification	Gateway 0 – Gateway 3

Airline Engagement:

The Q6 design studies are shared and discussed with the airlines at specific airline working groups, at the CIP Working Group, and at the Q6 Portfolio Stakeholder Board.

Project Delivery

Current Control Budget:

Total Capital Budget (<i>Estimated At Completion</i>):	£19,000,000.00
--	----------------

Schedule:

Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
March – April 13	N/A	N/A	N/A

Assumptions:
The following points cover the significant delivery assumptions related to this project;
None.
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>

Operational Issues

HAL Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
		To be confirmed as outputs of the various studies.

Assumptions:
The following points cover the significant operational assumptions related to this project;
The specific assumptions associated with the various elements are primarily outputs to be tested & developed during the course of the studies themselves. Airline occupancy and the CAA determination are the most significant, particularly in the context of the recent IAG acquisition of bmi.

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
		To be confirmed as outputs of the various studies.

Assumptions:
The following points cover the significant operational assumptions related to this project;
The specific assumptions associated with the various elements are primarily outputs to be tested & developed during the course of the studies themselves. Airline occupancy and the CAA determination are the most significant, particularly in the context of the recent IAG acquisition of bmi.

Average Asset life:	
Average Asset Life:	10 - 50 Years
Commentary:	
The studies cover a wide spread of infrastructure development will comprise different elements with differing asset lives	
<i>Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.</i>	

Impact on User Charges:	
Estimated Per Passenger Cost Impact:	To be confirmed
Commentary:	
N/A	

Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only.

Non Construction Risk:

The following points cover any significant areas of risk for the Airline Community regarding this project.

N/A

Header Information

BCT No.	10472
Op No.	25837
Project Name:	Post Q5 Solutions D&D Studies

Project Overview, Objectives and Status

Overview:	
Description:	Strategic studies to support compilation & refinement of Q6 Business Plan
Ref. Drawings / Images: <i>(Refer to Annex A)</i>	
Objectives:	
HAL:	Provision of a transparent robust body of information to enable informed decisions in progressing agreement of the Q6 price control settlement. The studies will help ensure the settlement includes a capital plan of investments that improves passenger experience and provides the right capacity.
Airline:	As per HAL

Project Benefits:

Each study is targeted to close the identified Q6 gaps with solutions that are in line with agreed Heathrow Service propositions, and do so with sufficient detail to enable the prioritisation of individual solutions into and within the three Joint Heathrow Priorities.

Status:

Programme:	Project Gateway Stage:
Programme Identification	Explore

Airline Engagement:

The Q6 studies and Masterplanning components are shared and discussed with the airlines at the CIP Working Group and the CSW there are also a number of Airline Working Groups for specific areas of study e.g. Masterplan, Terminal 3 and Terminal 5.

Project Delivery

Current Control Budget:

Total Capital Budget <i>(Estimated At Completion)</i> :	Q5 : £15,299,624 Q6 : TBA
---	------------------------------

Refer to Annex B for cost information detail.

Schedule:

Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
July 2011*	N/A	N/A	N/A

Refer to Annex C for programme information detail.
Assumptions:
The following points cover the significant delivery assumptions related to this project;
None.
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>

Operational Issues

HAL Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
		To be confirmed as outputs of the various studies
Assumptions:		
The following points cover the significant operational assumptions related to this project;		
The specific assumptions associated with the various elements are primarily outputs to be tested & developed during the course of the studies themselves. Airline occupancy is one of the most significant, particularly in the context of the recent IAG acquisition of bmi.		

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
		To be confirmed as outputs of the various studies
Assumptions:		
The following points cover the significant operational assumptions related to this project;		
The specific assumptions associated with the various elements are primarily outputs to be tested & developed during the course of the studies themselves. Airline occupancy is one of the most significant, particularly in the context of the recent IAG acquisition of bmi.		

Average Asset life:	
Average Asset Life:	10 - 50 Years
Commentary:	
The studies cover a wide spread of infrastructure development will comprise different elements with differing asset lives.	
<i>Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.</i>	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	To be confirmed

Commentary:
TBC.
<i>Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only.</i>

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project.
It is highly likely a series of airline moves will be associated with the Heathrow Q6 output. Phased build may entail periods where Pier Service levels are impacted.

Annex A: Joint Heathrow Priorities & associated Service Propositions

These joint priorities map to our joint Heathrow service propositions

Joint Priorities

Deliver a noticeably better, "hub of choice" **passenger experience** through Heathrow, delivering improvements in areas that are most meaningful for our passengers

Ensure sufficient **hub capacity** is in place to handle forecast aircraft and passengers, with **improved resilience**

Ensure a competitive total **cost of operation** relative to Heathrow's passenger mix, service and facilities

Service Propositions

- Heathrow Airport's way finding, including layout and design, will be intuitive and provide passengers with the information they need
 - Security provides a consistently excellent service to passengers, staff and vehicles moving around the airport in order to provide efficient air transport services to passengers
 - Immigration will provide a quick, courteous service which is on a par with other upper quartile international hub airports
 - Heathrow Airport will be easier to travel to and from for more people
 - The Heathrow Airport Community will ensure a consistent, seamless, efficient and courteous service from all airport staff
 - Heathrow Airport will create an environment and experience to create memorable moments for passengers
 - The Heathrow Airport Community will work together to minimise passenger stress and delay during periods of disruption
-
- Heathrow Airport will provide terminals which will support airline and passenger expectations.
 - Heathrow Community (airport, airlines & service providers) will improve their service delivery & resilience to enable airlines to provide a more reliable service
 - All transfers for people and bags should be simple, quick, reliable and predictable
-
- Heathrow Airport will provide facilities and services for airlines and their business partners to drive efficiency and deliver improved customer service
 - Heathrow Airport will continuously strive to reduce Heathrow Airport and airline opex
 - Heathrow Airport will strive to grow non-aero whilst still providing an excellent passenger experience
 - Heathrow Airport will strive to improve capex efficiency, thus providing improved passenger facilities at a lower cost
 - Heathrow Airport and its airline partners will seek to continuously improve processes

Annex B: Project Delivery – Cost Information:

Project Information

Project Name: Post Q5 Solutions D&D Studies
 BCT No.: 10472

Cost Information

All information extracted from March 2013 month end process

Base Costs:	£0	0	%
On-Cost: (Masterplanning) (Non-Masterplanning):	£15,299,624	100	%
Inflation	£0	0	%
Opportunity	£0	0	%
Risk	£0	0	%
Total	£15,299,624	100	%

Commentary:

The various studies are split between those managed under the Masterplanning & Capacity Team, and those by the Programme Identification. The preliminary, desktop nature of the study work renders them as "on-costs", and the risk is included within each unlet workstream, and let work is on a fixed price basis.

Cost Benchmark Comparisons:	
Project Name:	Post Q5 Solutions D&D Studies
Total Capital Budget (<i>Constant Prices</i>):	N/A
Guidance Notes:	
Due to the nature of the work within this project the cost plan has not been benchmarked however each defined element of scope has been validated by an understanding of a "should-cost". Also in accordance with HAL Capital policy each element of work to date has been competitively tendered between compliant HAL framework suppliers procured under OJEU. The scope moving forwards will all also be subject to a competitive bid process between HAL framework suppliers procured under OJEU. Not applicable at this stage in the project's lifecycle.	
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.	

Header Information

BCT No.	7720
Op No.	24184
Project Name:	T2A Phase 2

Project Overview, Objectives and Status

Overview:	
Description:	Design to support continued development of T2 post-2014
Ref. Drawings / Images:	Refer to Annex A
Objectives:	
HAL:	Delivery of capital projects with minimum disruption to operation Improve understanding of development phasing options Service quality improvement Operational efficiencies
Airline:	As per HAL.

Project Benefits:
Delivery of capital solutions with reduced operational disruption. Increased airport flexibility. Service quality improvement – for both direct and transfer passengers. Operational efficiencies – creating resilience and cost benefits. Key element of the long-term transformation of airport.

Status:	
Programme:	Project Gateway Stage:
Programme Identification	Brief Decision

Airline Engagement:
Updates and reviews have been held with the airline community at the following for a at appropriate times or on request: STAR PET Terminal 2 Stakeholder Board Eastern Campus Stakeholder Gateway Events JST Strategic Choices LACC CIP Working Group CSW – Working Group Q6 Portfolio Stakeholder Board

Project Delivery

Current Control Budget:			
Total Capital Budget (<i>Estimated At Completion</i>):		£9,161,557	
<i>Refer to Annex B for cost information detail.</i>			
Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
09 / 2008	N/A	N/A	N/A
Assumptions:			

The following points cover the significant delivery assumptions related to this project:

Q5 funding of this project is for
Early options and design, including constructability.
Early feasibility assessments.
Early cost advice to support design above.

Scope

Extension of T2A as per existing planning permission, to include 3 pier-served Code F stands and 5 remote stands.
T2A-Passenger Transport Interface planning including any required safeguarding works.
New segregated T2C Pier with 6 Code F (1 MARS) and 10 Code E stands
Fit out of TTS Maintenance base between T2B and T2C.
Construction of the TTS and Baggage tunnels between T2A and T2B, and the remaining sections connecting T2B to T2C.
Fit out of T2A, B and C TTS station zones and the interconnecting running tunnels.
Installation, testing and commissioning of the new TTS System.
Safeguarding for potential Cross-Campus TTS connectivity.

Design

Design solutions to be non-airline specific.
Acquisition of Eastern Maintenance Base resolved so that the T2C pier can be constructed and the operational airfield extended accordingly, including re-alignment of the North/South Alpha and Bravo taxiways, re-alignment of Eastchurch Road and Cathedral Hangar demolition.
High level T2 Phase 2 parameters set by the most recent revision of Terminal 2A's planning permission (March 2010 Revised Reserved Matters) remain fixed.
T2C to accommodate only international traffic.
T2 Phase 1 will continue to operate with no impact on its capacity or processes throughout the construction of T2 Phase 2.

Key enablers

Completion of T2A Phase 1 and of T2B projects.
Completion of a new CTA VIP suite prior to the demolition of the Hounslow Suite.
Vacant possession of all demolition & work zones.
Part-demolition of BA facility Technical Building East (TBE).
Demolition of BA facility Cathedral Hangar.
Phased demolition of T1, including MSCP1.
Re-alignment of the Northern & Southern Runway holding areas.
Code F compliant re-alignment of a section of the Bravo Taxiway north of T1.
Eastern Airside Road extension to either Viscount Way or the diverted Eastchurch Road, including a new Control Post.
Creation of additional infrastructure services to support extended terminal.

Exclusions

T1: future passenger-facing configuration, on-going operational strategy and building management.
Multi Storey Car Park 2 Phase 1 and Phase 2.
Central Terminal Area redevelopment.

Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.

Operational Issues

HAL Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
To Be Confirmed		
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
Open gate lounge basis. Flexible use of infrastructure. Some degree of baggage automation.		

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
To Be Confirmed		
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
None		

Average Asset life:	
Average Asset Life:	10 - 50 Years
Commentary:	
The development will comprise a range of asset types, with different asset lives.	
<i>Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.</i>	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	None undertaken
Commentary:	
N/A	
<i>Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only.</i>	

Non-Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project.
A series of airline moves may be required to realise the benefits of this project; before, during and after the delivery of built works.

Appendix G: IT / Systems Programmes

25824	Asset Management
30420	Data Optimisation
9825	Computer Room Remediation
9826	Programme Controls
9992	IT Baggage Phase 1
30054	IT Security Programme
9821	Radio Systems Programme
30422	Q5+1 Desktop and Mobile Infrastructure Services
25397	T3P6 Equipment Room Move
30517	Wide Area Mobile Data

Header Information

BCT No.	
Op No.	25824
Project Name:	Asset Management – Maximo Replacement

Project Overview, Objectives and Status

Overview:		
Description:	The purpose of this project is to complete a re-implementation of the Enterprise Asset Management system, Maximo (<i>the current version is 5.2 and now out of support with IBM</i>).	
Ref. Drawings / Images: (Refer to Annex A)	None.	
Objectives:		
HAL:	<p>The objectives of the project are to deliver:</p> <ul style="list-style-type: none"> Fully supported and up to date asset management system with minimal customisations To define clear asset data structures that are well understood, support the business processes and deliver the required management information Replace current interfaces to Oracle Financials in existing functional areas An interface to Heathrow Map Live A technology solution that supports the airfield in delivering an enhanced and compliant inspection and maintenance process An automated customer feedback solution A consolidated system for asset integration A technology solution to mobilise the workforce Standardised functionality based upon a standardised set of processes Efficient tools for the production of management information A sustainable training environment for on-going system training requirements 	
Airline:		
Project Benefits:		
<p>This project will deliver some immediate benefits and these can be measured and realised immediately following the project completion. These are:</p> <ul style="list-style-type: none"> Mitigation from risk of disruption to the business from system downtime Compliant airfield inspection and maintenance process in line with best practice identified in third party independent reports Sustainable training environment <p>Other benefits will be delivered over the longer term through enabling business improvement and will be tracked through the engineering change programme activities.</p>		
Benefit	Benefit Category	Measure
Mitigation of risk of disruption to the business from system downtime	Risk Mitigation	Up to date system implemented with standard support arrangements in place with the

		vendor
Compliant airside inspection and maintenance processes	Risk Mitigation	Successful audit from the CAA
Sustainable training environment and consistent training materials	Non-financial	A training environment implemented that is supported by Heathrow IT
Post-Handover Integration Tasks Reduced	Efficiency	Time taken from handover to "maintainable asset" reduced
Improved stock control	Efficiency	Inventory performance measures will include: Stock turnover increased Value of stock adjustments decreased Stock availability increased Stock value decreased
Increased technician productivity	Efficiency	Technician performance measures will include: Travel time decreased Tool time increased Work order backlog reduced
Improved fault response	Efficiency	Faults response will be measured by: Faults fixed first time increased Reschedules decreased Time to respond decreased Time to fix decreased
Improved asset performance	Efficiency	Asset performance will be measured through: Asset availability increased Mean time between failure increased
Improved management of contractors (financial and performance)	Efficiency	Contractor performance will be measured by: Time to respond decreased Time to fix decreased Work order backlog decreased
Improved customer satisfaction	Non-financial	Property stakeholder survey shows improvement
Efficient performance management	Efficiency	A system that enables automated reporting introduced so: Time to produce reports reduced
Better informed decision making	Efficiency	Level of confidence in the data improved

Status:	
Programme:	Project Gateway Stage:
Asset Management	Construction Decision

Airline Engagement:
IT Working Groups – last one attended 5 th March 2013.

Project Delivery

Current Control Budget:	
Total Capital Budget (<i>Estimated At Completion</i>):	£11,344,000
<i>Refer to Annex B for cost information detail.</i>	

Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
07/2011			28/02/2014
<i>Refer to Annex C for programme information detail.</i>			

Assumptions:
The following points cover the significant delivery assumptions related to this project; Commercial Agreements finalised with Supplier to enable April start of BTI Phase. Business Resources available for UAT and training as per project Plan.
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>

Operational Issues

HAL Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:

Assumptions:
The following points cover the significant operational assumptions related to this project; This is a re-implementation of an existing service. It is assumed that the existing service costs will not significantly increase.

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:

Assumptions:
The following points cover the significant operational assumptions related to this project; N/A

Average Asset life:	
Average Asset Life:	5 Years
Commentary:	
None	

Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.

Impact on User Charges:

Estimated Per Passenger Cost Impact:	N/A
--------------------------------------	-----

Commentary:

None

Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only.

Non Construction Risk:

The following points cover any significant areas of risk for the Airline Community regarding this project.

None

Annex B: Project Delivery: Cost Information:

Project Information

Project Name: Asset Management – Maximo Replacement
Op No.: 25824

Cost Information

All information extracted from March 2013 month end process

Base Costs:	£10,006,000	88	%
On-Cost:	£988,000	9	%
Opportunity	£0	0	%
Risk (R1 Allowance Only)	£350,000	3	%
Total	£11,344,000	100	%

Commentary:

Cost Benchmark Comparisons:	
Project Name:	Asset management – Maximo Replacement
Total Capital Budget (<i>Constant Prices</i>):	£11,344,000
Guidance Notes:	
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>	

Header Information

BCT No.	
Op No.	30420
Project Name:	Data Centre Optimisation

Project Overview, Objectives and Status

Overview:	
Description:	<p>The Infrastructure Portfolio within the HAL's Systems and Technology Strategic Programme has identified three workstreams ("S&T Workstreams") that require information technology solutions to meet the HAL's Q5+1 business needs, one of which is the Data Centre Optimisation. The workstream was initiated in September 2012, and is due to deliver by March 2014 (Q5+1). The Data Centre Optimisation Project includes the following initiatives:</p> <p>IT115 - Server Platform Refresh: Technology refresh for legacy server hardware which is deemed as end of life, determined as being five years after the manufactured shipped date.</p> <p>IT116 - Sun Refresh: To refresh legacy SUN hardware.</p> <p>IT117 - Data Centre & Node Room Management: To provide for on-going improvement and maintenance of the data centre and node rooms.</p> <p>IT290 - Data Centre Capacity Management: Leverage and optimise capacity in Heathrow Airport Ltd core data centres.</p>
Ref. Drawings / Images:	None
Objectives:	
Heathrow	Ensure the Business is provided with a fully supported, up to date, resilient platform to work on, whilst defining the longer term strategy required for Q6.
Airline:	Airport resilience.

Project Benefits:	
<p>IT117 – Data Centre & Node Room Management</p> <p>Server Workload Profiling: Provides a blueprint for the existing legacy systems to be transitioned into a new virtual environment via accurate modelling and analysis with speed and efficiency therefore reducing risk and migration downtime windows.</p> <p>Upgrade VMware VSphere: Improvements in virtualisation consolidation ratios allowing the deployment of more servers in less physical space. Business continuity is optimised by improved disaster recovery capability. The ability to provision systems in days rather than weeks. Systems and applications can take advantage of enhanced compute power and are therefore much more scalable. Increased energy efficiency by improved server power management. Improved application and service availability enabled by zero-downtime migration. Enablement of automation rules to provide service offerings to the business, which in turn allows speed and efficiency for the provision of new services.</p> <p>Refresh of legacy hardware:</p>	

Applications hosted on modern faster more reliable hardware.
 Improvements in environmental sustainability factors through the provision of energy efficient hardware.
 Server consolidation and rationalisation:
 Risk reduction through migration of legacy key business systems to a supported common hardware platform.
 Reduced power consumption requirements.
 Reduction in server footprint within the data centres freeing up space for other services.
 Offers horizontal scalability potential allowing faster application deployment or upgrades (reduced system downtime).
 Server decommissioning:
 Remove larger, power-hungry aging hardware.
 Will alleviate capacity constraints in the data centres (power, space and network).
 Risk reduction by moving critical systems to current supportable platforms.
 IT116 – SUN Refresh
 Refresh of Legacy hardware:
 Applications hosted on modern faster more reliable hardware.
 Migration to new hardware / OS Platforms:
 Replace larger and aging SUN hardware with smaller and cheaper to run equipment.
 To provide supportable standardised SUN hardware, operating system and application infrastructure.
 Smooth service transition using a pragmatic approach with a case by case analysis of services.
 Server decommissioning:
 Remove larger, power-hungry aging SUN hardware.
 Free up space in the data centre.
 Reduce power consumption and cooling requirements enabling capacity in the data centres.
 Risk reduction by moving critical systems to current supportable platforms.
 IT117 – Data Centre & Node Room Management:
 ITF Cooling upgrade
 Improvements in energy efficiency.
 Relocation of cooling systems to outside the ITF building creating more space inside to deploy test systems.
 IT290 – Data Centre Capacity Management:
 Extension of high density rack deployment (Hot Aisle Containment).
 Allows more servers to be deployed in less physical space.
 Improvements in energy efficiency.
 Relocate 3Par Storage to accommodate HAC extension:
 Create space for Hot Aisle Containment expansion providing optimised space to deploy more services.

Status:	
Programme:	Project Gateway Stage:
IT Infrastructure	Viability completed and entering Definition

Airline Engagement:
 Consultation with airlines has been completed through programme governance using a Business Case for approval for Viability Phase (August 2012)

Project Delivery

Current Control Budget:	
Total Capital Budget (<i>Estimated At Completion</i>):	£5,844,822
<i>Refer to Annex B for cost information detail.</i>	

Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
N/A	09 / 2012	03 / 2014	03 / 2014
<i>Refer to Annex C for programme information detail.</i>			
Assumptions:			
The following points cover the significant delivery assumptions related to this project;			
Appropriately skilled and dedicated resources will be available throughout the duration of the Q5+1 timeframe.			
Key deliverables for each Project Phase will follow the guidelines provided within the latest Project Operating Model (POM), where applicable and agreed with The Company. Information will be added as further detail becomes available and HAL clarify the Key Focus Areas proposed for priority.			
It is expected / assumed that the recommended options will support the strategic vision for Q6.			
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>			

Operational Issues

HAL Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
N/A	N/A	N/A
Assumptions:		
The following points cover the significant operational assumptions related to this project;		
Not known at this stage, this cost will be known at the end of the design stage.		

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
N/A	N/A	N/A
Assumptions:		
The following points cover the significant operational assumptions related to this project;		
Not known at this stage, this cost will be known at the end of the design stage.		

Average Asset life:	
Average Asset Life:	5 Years
Commentary:	
None	
<i>Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.</i>	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	N/A
Commentary:	
None	
<i>Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only.</i>	

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community

regarding this project.

Not known at this stage, this cost will be known at the end of the design stage.

Header Information

BCT No.	9825: IT02 - IT Infrastructure Renewal
Op No.	25222
Project Name:	Computer Room Remediation

Project Overview, Objectives and Status

Overview:	
Description:	<p>The project is to remediate 78 IT rooms that are in need of remediation to an appropriate level of Health & Safety and ensure the following:</p> <ul style="list-style-type: none">▪ Reviewing and updating the security processes and procedures in conjunction with security access to the rooms.▪ The ownership of these rooms, the Facilities team's Roles and Responsibilities (R&R), and long term asset stewardship.▪ The services including the appropriate level of cooling within the room.▪ Maintaining and standardising Health & Safety (H&S) in all the rooms.▪ Removal of redundant equipment (network, server, engineering) and cabling to the confines.
Ref. Drawings / Images:	None
Objectives:	
HAL:	Improve Health & Safety within the Airport
Airline:	Airline project objectives include: Increasing alliance co-location and improve pier service.

Project Benefits:
<p>The expected reduction of specific safety and security risks mainly represents a long-term cost reduction due to safeguarding, rather than direct savings.</p> <p>Support incidents are expected to reduce when the environmental issues have been addressed. This will reduce cost and disruption to Heathrow airport's operation. The Health and Safety risks will be reduced. HAL is currently focussing on and addressing any potential issues with the support of the IT Health and Safety team.</p> <p>Redundant services, whether network, server, engineering, or cabling, will be removed and environmentally disposed of. This will free up valuable space across the main terminals whilst removing power and cooling wastages.</p> <p>The remediation and consolidation process will further reduce the complexity of the legacy systems installed in these facilities, consequently reducing the requirement for the current number of facilities, and in turn reducing the overall support needed.</p> <p>This project starts to address airline challenges around the Common Infrastructure policy (CI), allowing HAL Heathrow to raise the level of confidence on availability and Service Level Agreements (SLA's).</p> <p>The Government's legislation for Carbon Reduction Commitment (CRC) Energy</p>

Efficiency Scheme (EES) is due to come into force imminently and carries with it certain penalties. The outcomes from this project will ensure that it provides tangible assistance to HAL in achieving its carbon reduction targets by removing wasteful power and cooling losses and introducing efficiency through the remediation / consolidation exercise. Better monitoring of power usage is also expected to provide assistance for more accurate Carbon Credit forecasting.

Status:	
Programme:	Project Gateway Stage:
IT	Design

Airline Engagement:
Feb 2012

Project Delivery

Current Control Budget:	
Total Capital Budget (<i>Estimated At Completion</i>):	£10,380,948
<i>Refer to Annex B for cost information detail.</i>	

Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
Feb 2010	Oct 2011	Dec 2013	N/A
<i>Refer to Annex C for programme information detail.</i>			

Assumptions:
The following points cover the significant delivery assumptions related to this project;
<ul style="list-style-type: none"> Key assumptions of the project are that the rooms have been broken down into smaller sub groups and then sub groups again, so that we are working on groups of 8 rooms. The project will not conduct any intrusive work in the data room during any busy periods.
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>

Operational Issues

HAL Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
N/A	N/A	N/A

Assumptions:
The following points cover the significant operational assumptions related to this project;
<ul style="list-style-type: none"> Not known at this stage, this cost will be known at the end of the design stage

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
N/A	N/A	N/A

Assumptions:
The following points cover the significant operational assumptions related to this

project;
<ul style="list-style-type: none"> N/A

Average Asset life:	
Average Asset Life:	5 Years
Commentary:	
None	
<i>Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.</i>	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	N/A
Commentary:	
None	
<i>Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only.</i>	

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project.
<ul style="list-style-type: none"> Not known at this point in time in the project

Annex B: Project Delivery: Cost Information:

Project Information

Project Name: Computer Room Remediation
 BCT No.: 9825

Cost Information

Information from March 2013 month end

Base Costs:	£8,108,869	78	%
On-Cost:	£989,306	10	%
Opportunity	£0	0	%
Risk (R1 Allowance Only)	£1,282,773	12	%
Total	£10,380,948	100	%

Commentary:

Cost Benchmark Comparisons:	
Project Name:	Computer Room Remediation
Total Capital Budget (<i>Constant Prices</i>):	£10,380,948
Guidance Notes:	
The initial costs were taken in 2010, however at each stage of the project we are tendering to multiple suppliers and benchmarking the costs.	
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>	

Header Information

BCT No.	9826 - IT03: Business Planning & Support IT Solutions
Op No.	25290
Project Name:	Programme Controls

Project Overview, Objectives and Status

Overview:	
Description:	Delivery of a suite of Primavera applications – P6, PRA, P6 Analytics, PPM and others - to enable better control over Projects, Programmes and the Portfolio, with associated improved business processes.
Ref. Drawings / Images: <i>(Refer to Annex A)</i>	None.
Objectives:	
HAL:	To replace the end of life Artemis system and increase the reliability of management information. Improve planning and scenario modelling to enable intelligent decision making. Improve the management control capability for managing a multi-billion pound CIP.
Airline:	

Project Benefits:
Reduce costs by an estimate of £11,677,626 by increasing productivity and reducing administration work, overall risk and better planning.

Status:	
Programme:	Project Gateway Stage:
Systems and Infrastructure	Design

Airline Engagement:
IT Working Group

Project Delivery

Current Control Budget:			
Total Capital Budget <i>(Estimated At Completion):</i>		£17,000,000	
<i>Refer to Annex B for cost information detail.</i>			
Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
06 / 2010	n/a	n/a	06/ 2013
<i>Refer to Annex C for programme information detail.</i>			
Assumptions:			
The following points cover the significant delivery assumptions related to this project;			
All essential reports will be signed-off before go-live.			
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>			

Operational Issues

HAL Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
		N/A
Assumptions:		
The following points cover the significant operational assumptions related to this project;		
N/A		

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
		N/A
Assumptions:		
The following points cover the significant operational assumptions related to this project;		
See Project Benefits section.		

Average Asset life:	
Average Asset Life:	5 Years
Commentary:	
None.	
<i>Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.</i>	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	N/A
Commentary:	
N/A	
<i>Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only.</i>	

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project.
N/A

Annex B: Project Delivery: Cost Information:

Project Information

Project Name: Programme Controls
BCT No.: 9826

Cost Information

All information extracted from March 2013 month end process

Base Costs:			13,756,177	80.9	%
On-Cost:			1,966,752	11.6	%
Opportunity			£0	0	%
Risk (R1 Allowance Only)			1,277,071	7.5	%
Total			£17,000,000	100	%

Commentary:
N/A

Cost Benchmark Comparisons:	
Project Name:	
Total Capital Budget (<i>Constant Prices</i>):	£24,000,000
Guidance Notes:	
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>	

Header Information

BCT No.	9992
Op No.	25293
Project Name:	IT Baggage Phase 1

Project Overview, Objectives and Status

Overview:	
Description:	<p>Baggage performance information is critical if HAL is to create greater efficiency and productivity in its baggage operation. To enable this, HAL IT initiated the IT Baggage Programme in 2009 to create an integrated baggage information system to enable the entire Heathrow Baggage Product to be planned, operated and maintained as a coherent, integrated, Airport-wide solution. The IT Baggage Programme is a critical enabler for Heathrow's Baggage 2018 Operating Plan, with solutions being delivered in accordance with Heathrow IT strategy. Several "Airport-wide" solutions will be delivered by the programme, including the Airport Message Distribution (AMD) system, the Airport Data Repository (ADR) and the Management Information System (MIS). As well as critical for the future step change required in baggage operation, they are also key enablers for initiatives outside Baggage, including Real-Time Heathrow and Combined Control Room.</p>
Ref. Drawings / Images: <i>(Refer to Annex A)</i>	<ul style="list-style-type: none"> • Figure 1 and 2 shows the context of HIBS components including an illustration showing how HIBS enables services to be shared across the Airport. • Figure 3 shows the high-level view of the Enterprise Service Bus (ESB) which provides the Airport Message Distribution function. • Figure 4 shows the high level view of the ADR & MIS which comprises of multiple and parallel layers to increase performance and resilience. • Figure 5 shows HIBS benefits map (Just ADR & MIS Elements)
Objectives:	
HAL:	<p>HAL's project objectives are to deliver an Integrated Baggage IT System that will enable the Baggage Operation to manage the airport-wide baggage product in a coherent and consistent way across the Airport, to improve all aspects of the operation and contribute to making a step change in Transfer Baggage performance in line with Heathrow's strategic intent. HIBS achieves this through introducing consistency, simplifying topology and by enabling resources and information to be shared across the airport, allowing efficiency and performance to be increased.</p>
Airline:	<p>This improvement to HAL infrastructure will provide tools and improved performance which should help improve the Baggage Product and, in particular, aid in the reduction of Missed Bags.</p>

Project Benefits:

The ADR and MIS Solution is core to realising IT Baggage Programme benefits that were identified and approved during Programme Initiation; they are also core to enabling the

delivery of the overall Baggage Strategy for Heathrow 2018 and are also an essential enabler for several non-baggage programmes, including Real-Time Heathrow and the newly initiated APOC programme.

In addition to enabling other programmes, direct benefits delivered by ADR & MIS include:

- Improved Operational Information through single centralised airport baggage inventory and, together with MIS, provides airport-wide visibility and the necessary data to enable automated controls to allow baggage to be swiftly routed, tracked and managed between terminals, secure storage areas and make-up positions across the airport.
- Improved recovery from failure and exceptions.
- Improved Information re-use and Lifecycle Management.
- System Replacement and Consolidation.
- Reduce operating cost through better operational controls and coordination through airport-wide reporting and management Information; for example, reduce manual coding stations costs & system support.
- Address health and safety issues.

Benefits map for the ADR & MIS elements of HIBS is shown in Annex A, Figure 5.

Status:	
Programme:	Project Gateway Stage:
Development	Construction Decision

Airline Engagement:
Airline Engagement happens on a monthly basis as part of the IT Baggage Steering Group, and has done since the Programme started in 2010. The naming convention of the Group has changed from a Working Group to a Steering Group as this is just an endorsement forum, any need for the Airlines to discuss HIBS Architecturally, a Working Group will be scheduled.

Project Delivery

Current Control Budget:	
Total Capital Budget (<i>Estimated At Completion</i>):	£10,571,934
<i>Refer to Annex B for cost information detail.</i>	

Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
09 / 2009	10 / 2009	12 / 2013	10 / 2013
<i>Refer to Annex C for programme information detail.</i>			

Assumptions:
The following points cover the significant delivery assumptions related to this project; HIBS Systems – i.e. ESB Baggage Services and ADR & MIS will be required in 2013 in order to support the integrated testing and go-live of the Baggage systems in T5 Western Baggage Upgrade, T1, T2, T3IB and T4.

Assumptions that have been made in the preparation of the business case, and are fundamental to the success of the project are as follows:

Baggage Strategy is still current and supported

The recently reviewed 2018 Baggage Operating Strategy agreed with the AOC in May 2009 still has HAL executive support. The reviewed strategy has not significantly changed. The HIBS Programme delivery is focussed to support this strategy and this assumption is fundamental.

Development Programmes deliver in accordance with strategy and to agreed timescales.

With the view that the in-flight Baggage Capital Programmes are delivering in support of the Baggage Strategy and will deliver their elements, in line with the agreed specifications and timescales, to integrate with the Heathrow Integrated Baggage Solution and support the overarching Baggage Strategy.

HAL SAN Storage and Long-term Archive

It is assumed that the capacity and performance of the HAL enterprise storage and backup / archive systems will be increased to cater for the storage and performance requirements of the Baggage Programmes, including those of the ADR & MIS project, as per the detailed specifications which have been supplied to the BAU storage teams.

Master Data Management

It is assumed that following the implementation of ADR & MIS, the owners of Airport Reference Data will work with the HAL Information Architect to ensure that all updates and changes to reference data are updated and maintained in the ADR and that the Information Architect will ensure that an on-going review, approval and update process for maintaining this data is agreed and implemented.

Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.

Operational Issues**HAL Financial Revenue and Operational Cost (Opex) Impact:**

Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Application Support	£677,000	ADR and MIS Application Support will be provided by Cap Gemini. Figures are being agreed but projected costs are in the region of £677kpa.
Support	£191,000	Oracle Platform Support, capital licence cost and the on-going support costs
Support	- TBC	Analysis on-going, once HIBS is operational, savings will be derived from decommissioning existing systems: <ul style="list-style-type: none"> - SE MIS - Merlin - T5 MIS

Assumptions:

The following points cover the significant operational assumptions related to this project;

The Opex impacts of the ADR & MIS are currently subject to variation due to on-going supplier negotiations. Opex costs are in the process of being determined and validated.

Airline Financial Revenue and Operational Cost (Opex) Impact:

Revenue / Opex	Revenue (+) /	Commentary:
----------------	---------------	-------------

Cost Area:	Cost (-) Impact per Annum:	
		Unknown until Support contracts are finalised and discussion via the Non-regulated charges group have been conducted. Full details expected June 2013.

Assumptions:

The following points cover the significant operational assumptions related to this project;

- Operations will define the required reporting in a timely manner
- Operations will begin to use the ADR / MIS environment for reporting

Average Asset life:

Average Asset Life:	5 Years (Hardware)
---------------------	--------------------

Commentary:

None.

Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.

Impact on User Charges:

Estimated Per Passenger Cost Impact:	N/A
--------------------------------------	-----

Commentary:

None

Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only.

Non Construction Risk:

The following points cover any significant areas of risk for the Airline Community regarding this project.

- None

Header Information

BCT No.	N/A – (IT02: IT Infrastructure Renewal)
Op No.	30054
Project Name:	IT Security Programme

Project Overview, Objectives and Status

Overview:	
Description:	This programme of work is carried out to respond to the compliance audit and enhance system security. The programme will combine the current planned remediation activity with work streams that deliver tools and capabilities which we do not have today.
Ref. Drawings / Images: <i>(Refer to Annex A)</i>	None
Objectives:	
HAL:	The objective of the project is to develop and implement solutions to maintain and enhance, where possible, data security.
Airline:	Maintain IT data security.

Project Benefits:

<u>Financial Benefits</u> <ul style="list-style-type: none"> The risk of unplanned operational downtime is greatly reduced. <u>Non-Financial Benefits</u> <ul style="list-style-type: none"> Protection of HAL reputation More efficient user provisioning, rights management and delegated authorizations Simplified provisioning of external support services <u>Quick Wins</u> <p>A number of quick wins have been identified and will be delivered by the Security Operations team as part of business as usual.</p>
--

Status:

Programme:	Project Gateway Stage:
	Define

Airline Engagement:

The business case was presented to the IT Working Group for consultation on 11th October 2011, where it was endorsed.

Project Delivery

Current Control Budget:			
Total Capital Budget (<i>Estimated At Completion</i>):		£6,800,000	
Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
10/2011	01 / 2012	Q4 2012 - Q2 2013	Q4 2012 - Q2 2013
<i>Refer to Annex C for programme information detail.</i>			
Assumptions:			
The following points cover the significant delivery assumptions related to this project;			
Key assumptions relating to Define Phase:			
KSA1 - Inputs for the documents will be sought only from the Company and the			

Supplier personnel, and within the Company these inputs will be restricted to members of the IT department and Group Security.

KSA8 - Misalignment planning will focus solely on those items in the report that have not been flagged as 'business as usual'.

KSA10 - The technical solutions where possible are to use existing relationships or technologies used by the Company

Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.

Operational Issues

HAL Financial Revenue and Operational Cost (Opex) Impact:

Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
		Unknown at this stage

Assumptions:

The following points cover the significant operational assumptions related to this project;

See above – Further detail will become available as part of the Design phase.

Airline Financial Revenue and Operational Cost (Opex) Impact:

Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
		Unknown at this stage

Assumptions:

The following points cover the significant operational assumptions related to this project;

See above – Further detail will become available as part of the Design phase.

Average Asset life:

Average Asset Life:	
---------------------	--

Commentary:

Unknown at this stage

Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.

Impact on User Charges:

Estimated Per Passenger Cost Impact:	TBC
--------------------------------------	-----

Commentary:

Unknown at this stage

Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only.

Non Construction Risk:

The following points cover any significant areas of risk for the Airline Community regarding this project.

- To be identified as part of the Define Phase

Annex B: Project Delivery: Cost Information:

Project Information

Project Name: IT Security Programme
BCT No.: N/A

Cost Information

All information extracted from March 2013 month end process

Base Costs:	£5,503,495	81	%
On-Cost:	£1,020,000	15	%
Opportunity	£0	0	%
Risk (R1 Allowance Only)	<u>£276,505</u>	4	%
Total	£6,800,000m	100	%

Commentary:

None

Cost Benchmark Comparisons:	
Project Name:	IT Security Programme
Total Capital Budget (<i>Constant Prices</i>):	£6,800,000
Guidance Notes:	
N/A	
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>	

Header Information

BCT No.	9821, 10115, 9486 (IT02: IT Infrastructure Renewal)
Op No.	25397 (excluding RSP 06 T3P6), 30017, 24564
Project Name:	Radio Systems Programme

Project Overview, Objectives and Status

Overview:	
Description:	Programme of Radio and Cellular infrastructure and service improvements at Heathrow Airport
Ref. Drawings / Images: <i>(Refer to Annex A)</i>	None.
Objectives:	
HAL:	<p>The Vision of the Heathrow Radio Systems Programme is; "To provide mobile communications services at Heathrow Airport that are:</p> <ul style="list-style-type: none"> • Aligned with industry best practice and compliant with industry standards for safety and security. • aligned with Heathrow’s business strategy and operating model • Designed to support a safe operating environment for the airport." <p>To underpin this vision, the desired future technology state is as follows:</p> <ul style="list-style-type: none"> • To have defined, approved and adopted Standards relating to common Infrastructure, designed-in resilience, service availability and active System management • To ensure service availability through monitoring the fault status of active infrastructure and available radio capacity provided. • To have an approved and managed Strategy and technology roadmap for transition to emerging / known technologies such as digital PMR, TETRA and 4Gmobile data • Ensuring alignment to Heathrow KPI’S
Airline:	As per Heathrow.

Project Benefits:
<p>The Programme will deliver a Mobile Communications System which is:</p> <ul style="list-style-type: none"> • Compliant with health and safety legislation and standards. • Aligned with HAL’s operating license (CAP168) • Functions under an Operating and Governance model with clear &

joined up accountabilities.

- Exhibits a reduced risk of operational failure.
- Governed with effective ownership and control of on-going OPEX and CAPEX investment.
- Providing a predictable and maintainable service to HAL and Third party critical operations.
- Providing a better experience for HAL and Airline customers.

Status:	
Programme:	Project Gateway Stage:
Radio Systems Programme (Heathrow IT Operations)	Options Decision

Airline Engagement:
Multiple engagements with the airline community via the Airline Working Group and IT Stakeholder Programme Board. Specific endorsements against business case presentations as follows; <ul style="list-style-type: none"> - 3rd August 2010 - 7th June 2011 - 23rd September 2011 (IT Stakeholder Board update) - 8th November 2011

Project Delivery

Current Control Budget:			
Total Capital Budget (<i>Estimated At Completion</i>):		£7.076m	
		OP 25397: £4.096m	
		OP 30017: £1.097m	
		OP 24564: £1.883m	
<i>Refer to Annex B for cost information detail.</i>			
Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
08/2010	08/2010	06/2013	07/2012
<i>Refer to Annex C for programme information detail.</i>			
Assumptions:			
The following points cover the significant delivery assumptions related to this project;			
<ul style="list-style-type: none"> • Projects underpinning the programme will be delivered and supported by an outsourced IT company. • Common infrastructure will be deployed where possible in line with existing HAL published radio standards. • The programme will manage deviances from current forecasts by prioritisation within Q5 and Q5+1. • The Radio Systems Programme Board will allocate all project funding in place of the IT Programme board, under the terms of the recently approved Delegated Financial Authority (DFA) business case approved by the Heathrow Executive. 			
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>			

Operational Issues

HAL Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
IT	N/A	The programme is not forecasting to realise any Opex savings
Assumptions:		
The following points cover the significant operational assumptions related to this project;		
<ul style="list-style-type: none"> The Master Services Agreement states a 'to be' charging structure in line with having completed service transformation for the radio and cellular services. It is not expected that anything the programme is delivering will enable the IT Outsourcer to charge over and above the 'to be' service charge The programme is primarily related to safeguarding the radio and cellular services and will not make any direct revenue savings or bring about any additional revenue generation 		

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
		TBC
Assumptions:		
The following points cover the significant operational assumptions related to this project;		
N/A		

Average Asset life:	
Average Asset Life:	10 Years
Commentary:	
Radio infrastructure assets tend to have a lengthy asset life, and the extent of this will depend on the timescales within which HAL decide to upgrade to a digital service. Even at this time, many of the provisioned assets will remain in situ.	
<i>Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.</i>	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	TBC
Commentary:	
Unable to provide a commentary on the estimated per passenger cost impact.	
<i>Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only.</i>	

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project.
<ul style="list-style-type: none"> The radio and cellular services at Heathrow provide a service to a vast number of external stakeholders, and significant changes to the underlying infrastructure could put service continuity at risk. This will be managed on a project by project basis with careful consideration to fall back procedures and cutover planning.

Annex B: Project Delivery: Cost Information:

Project Information

Project Name: Radio Systems Programme
 BCT No.: 9821
 10115
 9486

Cost Information

All information extracted from March 2013 month end process

Base Costs:	£5.992m	85	%
On-Cost:	£0.874m	12	%
Opportunity	£0	0	%
Risk (R1 Allowance Only)	£0.210m	3	%
Total	£7.076m	100	%

Commentary:

The programme will not overspend against the Q5 CIP budget.

Note that the risk funds are only against approved project phases and do not encompass future project phases. It may therefore grow in size as cost certainty for future phasing is available.

Cost Benchmark Comparisons:	
Project Name:	Radio Systems Programme
Total Capital Budget (<i>Constant Prices</i>):	£7.237m
Guidance Notes:	
Benchmarking has been achieved through HAL's knowledge of similar radio related projects. Value for money has been demonstrated through following the defined processes within the IT Outsourcer master services agreement and also through tendering a number of work packages.	
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>	

Header Information

BCT No.	
Op No.	30422
Project Name:	Q5+1 Desktop and Mobile Infrastructure Services

Project Overview, Objectives and Status

Overview:	
Description:	<p>The Infrastructure Portfolio within the HAL's Systems and Technology Strategic Programme has identified three workstreams ("S&T Workstreams") that require information technology solutions to meet the HAL's Q5+1 business needs, one of which is called Desktop & Mobile Infrastructure Services (DM). The workstream was initiated in September 2012, and is due to deliver by March 2014 (Q5+1). The DM Services Tower includes the following initiatives;</p> <p>IT119 Desktop services (laptops and desktops) This project will replace thin clients with new desktop machines, while also migrating existing XP machines and their applications to Windows 7 where possible. This will reduce the risk for HAL when XP is out of support in 2014.</p> <p>IT122 Printers The primary requirement is to rollout a managed print service in-line with the needs of HAL to provide the business with a better quality and more cost effective printing solution.</p> <p>IT287 Virtual Desktop Upgrade This project covers the overall virtual desktop strategy (closely linked/part of the overall desktop strategy) which will aim to standardise the way services are delivered. The main component of the project is to provide a like for like refresh for existing capability provided by Citrix, however with reduced capacity (due to the user shift from thin to thick client) and migrated onto a platform that can be supported into the future.</p>
Ref. Drawings / Images: <i>(Refer to Annex A)</i>	None.
Objectives:	
HAL:	Ensure the Business is provided with a fully supported platform to work on, while defining the longer term strategy required for Q6. This will be provided by migrating XP desktops, provision of a managed print service, and a refreshed Citrix platform.
Airline:	None.

Project Benefits:

IT119 Desktop services (laptops and desktops)

- Reduced risk exposure to HAL due to XP going EoS in April 2014.
- Remove legacy risk whilst providing business continuity to support the critical services (new capability to deliver legacy applications to users).
- Extending applications supportability and useful life of existing desktop hardware.

IT122 Printers

- Better quality of printing service.
- Improve business productivity and sustainability:
 - Improved and consistent user printing service experience;
 - Reduced overall printer footprint;
 - Reduced power and network resource consumption; and,
 - Reduce paper consumption.

IT287 Virtual Desktop Upgrade

- Reduced risk exposure and increase in business productivity for HAL:
 - Through more flexible and reliable work styles;
 - Supporting third-party contractors and unmanaged workers more easily;
 - Enhanced mobility and user access to a server-based desktop;
 - This project covers the overall virtual desktop strategy (closely linked/part of the overall desktop strategy) which will aim to standardise the way services are delivered; and
 - Like for like refresh for existing capability provided by Citrix however with reduced capacity due to the user shift from thin to thick client.

Status:	
Programme:	Project Gateway Stage:
IT Infrastructure	Viability completed & now entering Define

Airline Engagement:
Consultation with airlines has been completed through programme governance using a Business Case for approval for Viability Phase

Project Delivery

Current Control Budget:	
Total Capital Budget <i>(Estimated At Completion)</i>	£4,773,789
<i>Refer to Annex B for cost information detail.</i>	

Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
N/A	09 / 2012	03 / 2014	03 / 2014
<i>Refer to Annex C for programme information detail.</i>			

Assumptions:
The following points cover the significant delivery assumptions related to this project;
The end user estate includes (approx.) 8,000 users, 7,200 end user devices, 1,200 laptops, 4,600 desktops, 1,400 thin clients
Any additional bandwidth required will be addressed by the Networks Tower
Any application remediation and changes are out of scope
Any AD remediation and changes are out of scope
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>

Operational Issues

HAL Financial Revenue and Operational Cost (Opex) Impact:		
Revenue /	Revenue (+) /	Commentary:

Opex Cost Area:	Cost (-) Impact per Annum:	
N/A	N/A	
Assumptions:		
The following points cover the significant operational assumptions related to this project;		
Not known at this stage, this cost will be known at the end of the design stage		

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
N/A	N/A	
Assumptions:		
The following points cover the significant operational assumptions related to this project;		
Not known at this stage, this cost will be known at the end of the design stage		

Average Asset life:	
Average Asset Life:	5 Years
Commentary:	
None.	
<i>Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.</i>	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	TBC
Commentary:	
None.	
<i>Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only.</i>	

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project.
Not known at this stage, this cost will be known at the end of the design stage

Annex B: Project Delivery: Cost Information:

Project Information

Project Name: Q5+1 Desktop and Mobile Infrastructure Services
BCT No.:

Cost Information

All information extracted from March 2013 month end process

Base Costs:	£3,682,721	77	%
On-Cost:	£716,068	15	%
Opportunity	£0	0	%
Risk (R1 Allowance Only)	£375,000	8	%
Total	£4,773,789	100	%

Commentary:

The risk allowance is for current phase of the project and not the overall project. Most of the costs will be spend in the build and implementation phase. On cost is based on 15% of the Base cost. A greater understanding of the Base costs will be known at the end of Design stage where the project will know if there are any opportunity costs.

Cost Benchmark Comparisons:	
Project Name:	Q5+1 Desktop and Mobile Infrastructure Services
Total Capital Budget (<i>Constant Prices</i>):	N/A
Guidance Notes:	
None.	
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>	

Header Information

BCT No.	
Op No.	25397
Project Name:	T3P6 Equipment room move (RSP06)

Project Overview, Objectives and Status

Overview:	
Description:	<p>Continuous operation of Private Mobile Radio services at Heathrow is required to fulfil our CAP168 license conditions to provide an effective communications system to support incident management, fire service, and airport fire service personnel, and also to support HAL Operations. A fundamental risk associated with being able to continue to provide this service relates to the current Main hosting facility for Heathrow being a caged space in an apron level plant room in Terminal 3 Pier 6 (T3P6) offering limited expandability, poor connectivity & poor environmental conditions for hosting HAL and third party radio equipment. The issue of space and suitability of existing equipment rooms was initially raised in the HAL document 'Radio Strategy for Heathrow Airport' (Version 0.85 and dated 15/06/09): Recommendation 72 of the Strategy recommends that;</p> <p><i>"HAL should investigate options to expand the available space in this plant room (being T3P6) or relocate PMR systems to another location".</i></p> <p>Following Options Development and specific surveys of the existing space, HAL has recognised that this plant room is unsuitable as a main radio co-location room, and will not sustain Heathrow's need for space in which to house Private Mobile Radio (PMR) equipment.</p> <p>As a consequence, there is now a need to find a new location that can function as the main radio co-location room for Heathrow, and to migrate services to that new facility. The Project has selected a suitable location in T5A, and will now migrate services to that new facility.</p>
Ref. Drawings / Images: <i>(Refer to Annex A)</i>	None.
Objectives:	
HAL:	<ul style="list-style-type: none"> • Delivery of a new Heathrow Main Radio Co-Location Room (RCLR) in T5A through recovery and conversion of space within the T5A Primary Radio Room. • Relocation of the PMR equipment in T3P6 into the new RCLR. • A product upgrade of the PMR base station equipment, at both the new main RCLR and the existing standby RCLR at D'Albiac House.

	<ul style="list-style-type: none"> A product upgrade of the Heathrow Optical Remote and Optical Master units across the Airport campus.
Airline:	Continued service without operational disruption.

Project Benefits:

The Project is forecasting to deliver the following non-financial benefits;

- Reduction in business risk and improved reputation through increased reliability of service
- Mitigation of Health and Safety risks driven by compliance with standards and regulations
- Enabler for other capital projects (e.g. Eastern Campus) through provision of a suitable radio room facility
- Enables improved management of the radio service through provision of equipment upgrades in line with Roadmap

Reduced future Capital expenditure in accommodating future equipment changes and system expansion through provision of additional space

Status:

Programme:	Project Gateway Stage:
Airport Resilience Strategic programme	Construction Decision

Airline Engagement:

IT Working group endorsement provided most recently on 12th June 2012. Previous endorsements provided at earlier project stages

Project Delivery

Current Control Budget:

Total Capital Budget (<i>Estimated At Completion</i>):	£4,153,578
--	------------

Refer to Annex B for cost information detail.

Schedule:

Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
19/08/2010	19/08/2010	30/04/2014	01/12/2013

Refer to Annex C for programme information detail.

Assumptions:

The following points cover the significant delivery assumptions related to this project;

- Cap Gemini will be the delivery partner through to completion.
- Legacy infrastructure can be upgraded without the need for significant service outage.
- The new main radio co-location room will come under the 'ownership' of IT facilities.

Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.

Operational Issues

HAL Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
IT	None	OPEX expenditure in relation to the project is unchanged from the current radio service charge paid to Cap Gemini
Assumptions:		
The following points cover the significant operational assumptions related to this project;		
<ul style="list-style-type: none"> • The services can be migrated to the new facility without significant service disruption. • Legacy infrastructure can be upgraded without significant service disruption. 		

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
N/A		No change
Assumptions:		
The following points cover the significant operational assumptions related to this project;		
<ul style="list-style-type: none"> • The services can be migrated to the new facility without significant service disruption • Legacy infrastructure can be upgraded without significant service disruption 		
Average Asset life:		
Average Asset Life:	5 Years	
Commentary:		
None.		
<i>Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.</i>		
Impact on User Charges:		
Estimated Per Passenger Cost Impact:		
Commentary:		
None.		
<i>Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only.</i>		

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project.
The service from the main radio co-location room must be in place by October 2013 so that Terminal operational readiness can proceed as planned

Annex B: Project Delivery: Cost Information:

Project Information

Project Name: T3P6 Equipment room move (RSP06)
BCT No.:

Cost Information

All information extracted from March 2013 month end process

Base Costs:	£4,102,269	99	%
On-Cost:	£0	0	%
Opportunity	£0	0	%
Risk (R1 Allowance Only)	£51,309	1	%
Total	£4,153,578	100	%

Commentary:

IT overhead charges are managed at Radio Programme level.

Cost Benchmark Comparisons:	
Project Name:	
Total Capital Budget (<i>Constant Prices</i>):	
Guidance Notes:	
N/A.	
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>	

Header Information

BCT No.	
Op No.	30517
Project Name:	Wide Area Mobile Data

Project Overview, Objectives and Status

Overview:	
Description:	<p>Recommendations made in the Begg report indicated that rapid communication of status information from staff working in the external environment, together with status and positional information regarding vehicles involved in the management of the airfield was key to the provision of situational awareness for operational staff. It follows that a lack of situational awareness may significantly reduce Heathrow's ability to make key decisions in the management of a crisis. In particular, during spells of severe weather conditions, Airside Operations need to be constantly aware of, and managing the impact of, the changing status of the airfield, i.e. stands, runways, taxiways, holding areas, and airside roads.</p> <p>To replace and/ or enhance existing non-sustainable initiatives, and to meet on-going future needs for mission critical external data communications, the project proposes implementation of a Wide Area Mobile Data infrastructure enabling mission critical communications services to be provided in an expandable & sustainable manner serving the needs of the Heathrow operation and the wider airline community.</p>
Ref. Drawings / Images: <i>(Refer to Annex A)</i>	None.
Objectives:	
HAL:	<p>The primary objective of this project is to deliver a mission critical, wide area mobile data (WAMD) networking capability across the external areas of Heathrow airport.</p> <p>In achieving this, the project will provide an enabling infrastructure service for future projects to deliver business benefits to HAL and other key Airport stakeholders, and thus enable the following outcomes:</p> <ul style="list-style-type: none">• Allow improved visibility and understanding of the status of the airfield in real time for up to 9,000 airside mobile and static assets.• Minimise passenger and airline disruption by keeping operational teams, airlines and ground handlers better informed throughout normal operations and during periods of crisis.• Facilitate a better recovery from operational issues, crisis or specific incidents.• Enable improved decision making during both normal operations and in abnormal situations (i.e. severe

	<p>weather conditions).</p> <ul style="list-style-type: none"> Facilitate a closer working relationship between airlines and ground handlers through the use of mobile devices supported by the wide area mobile data infrastructure solution. Enabler for provision of a mobile maintenance workforce, allowing asset inspection and maintenance updates from the airfield in real time.
Airline:	Yet to be confirmed.

Project Benefits:

- Allow improved visibility and understanding of the status of the airfield in real time for up to 9,000 airside mobile and static assets.
- Minimise passenger and airline disruption by keeping operational teams, airlines and ground handlers better informed throughout normal operations and during periods of crisis.
- Facilitate a better recovery from operational issues, crisis or specific incidents.
- Enable improved decision making during both normal operations and in abnormal situations (i.e. severe weather conditions).
- Facilitate a closer working relationship between airlines and ground handlers through the use of mobile devices supported by the wide area mobile data infrastructure solution.
- Enabler for provision of a mobile maintenance workforce, allowing asset inspection and maintenance updates from the airfield in real time.

Status:

Programme:	Project Gateway Stage:
Airport Resilience Strategic programme	Options Decision

Airline Engagement:

IT Working group endorsement provided on 22nd November 2012

Project Delivery

Current Control Budget:

Total Capital Budget (<i>Estimated At Completion</i>):	EAC: £1,843,371
--	-----------------

Refer to Annex B for cost information detail.

Schedule:

Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
19/12/2012	08/01/2013	31/03/2014	31/03/2014

Refer to Annex C for programme information detail.

Assumptions:

The following points cover the significant delivery assumptions related to this project;

- Completion of the project (post design) may be dependent on provision of additional funds. There is a current funding delta which will be

<ul style="list-style-type: none"> validated upon completion of design. The outcome of the recent OFCOM 4G auction does not weaken the business case. IT Commercial strategy is approved in line with impending 4G services.
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>

Operational Issues

HAL Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
IT	-£150,000	Managed service support for a new Airport service
Assumptions:		
The following points cover the significant operational assumptions related to this project;		
<ul style="list-style-type: none"> Airfield operations continue to have an operational need for the service. The Airline stakeholders continue to buy in to the concept of a 'community service' and have business requirement for 4G services. Q6 Projects gain funding approval to deliver applications against the capability being delivered. The Airline stakeholders continue to buy in to the concept of a 'community service' and have business requirement for 4G services. 		

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Airline operations	TBC	Potential revenue streams from airline stakeholders will be considered during the design phase of the project. Cost recovery of an element of the service charge is the likely outcome if airline's use the capability
Assumptions:		
The following points cover the significant operational assumptions related to this project;		
Airlines have an operational need for 4G services.		

Average Asset life:	
Average Asset Life:	5 Years
Commentary:	
None.	
<i>Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.</i>	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	TBC
Commentary:	

None.

Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only.

Non Construction Risk:

The following points cover any significant areas of risk for the Airline Community regarding this project.

None.

Appendix H: Surface Access

10146	Fleet Modernisation & Connect
Various	HEx Growth Projects
Various	HEx Asset Replacement

Header Information

BCT No.	10146
Op No.	25573
Project Name:	Fleet Modernisation & Connect

Project Overview, Objectives and Status

Overview:	
Description:	<p>Modernise the HEx fleet consisting of 332 trains in order to protect its current customer base and to facilitate further volume and yield growth in the next five to ten years.</p> <p>This project's budget has been accommodated by a change of use of project BCT4133 (OP 24298) – T4 Service Enhancement.</p>
Ref. Drawings / Images: <i>(Refer to Annex A)</i>	None
Objectives:	
HAL:	<ul style="list-style-type: none"> • To creating a more desirable and comfortable fleet to improve the customer journey experience, encourage usage and customer retention. • Protect and grow future revenues. • Differentiate the first class offering to align with airline premium customer expectations.
Airline:	<ul style="list-style-type: none"> • Improve passenger access to airline services at Heathrow. • Encourage increased use of Heathrow and rail access. • Improve passenger information system (PIS) • To improve the onward journey at the airport. • Reduced airport charges through rail revenue improvements.

Project Benefits:

As per above objectives

Status:

Programme:	Project Gateway Stage:
<p>The project is being undertaken in two stages:</p> <ul style="list-style-type: none"> • Stage One: £0.80m (completed). <p>Comprised of trialling a number of train interior designs and features, viewed and assessed by key Heathrow Express stakeholders, and final design agreed, with a fixed price and programme developed.</p> <ul style="list-style-type: none"> • Stage Two: £14.9m <p>Implementation of the modernisation programme based on the final design, programme and costs.</p>	<p>Project implementation is on-going; units 1 – 11 in service by the end of Q1 CY 2013.</p>

Airline Engagement:
Engaged through quarterly Rail Stakeholder Programme Board, and now via the Surface Access Stakeholder Programme Board meetings. Change of use (from BCT4133 to BCT10146) and CIP Working Group in Q4 2010 and Q1-2 in 2011. Airlines were invited to view a mocked up carriage in June 2011.

Project Delivery

Current Control Budget:
Total Capital Budget (<i>Estimated At Completion</i>): Q5: £15,700,000:

Refer to Annex B for cost information detail.

Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
Options decision at November 2011	Commenced Q3 2011	Project will take up to 2 years from start of full implementation.	Carriages will be put into operational service upon completion of each unit.

Refer to Annex C for programme information detail.

Assumptions:
The following points cover the significant delivery assumptions related to this project;

Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.

Operational Issues

HAL Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
		<p>Revenue impacts over five year period- Underpins CY2011 long term business plan. The following revenue outcomes over the first five years of the project are realistic and conservative:</p> <ul style="list-style-type: none"> • First Class volume & yield uplift potential £3.8m • Revenue from reconfiguring void space (CLA) £2.4m • Express Class volume potential £4.2m <p>Over a ten year period the project will deliver an IRR of 15.3% (pre-tax).</p>

Assumptions:
The following points cover the significant operational assumptions related to this project;
<ul style="list-style-type: none"> • HEx volume growth continues into Q6.

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
		Not known.
Assumptions:		
The following points cover the significant operational assumptions related to this project;		

Average Asset life:	
Average Asset Life:	Modernisation assets will have lives up to 10 years.
Commentary:	
<i>Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.</i>	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	
Commentary:	
None	
<i>Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only.</i>	

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project.
None

Annex B: Project Delivery: Cost Information:

Project Information

Project Name: Fleet Modernisation
BCT No.: 10146/ OP: 25573

Cost Information

	£m
Fleet Modernisation	
Mockup	0.7
Design finalisation	0.4
Fleet Preparation/ strip out/ transport	0.7
Lighting/ Ceilings upgrade	2.2
Flooring upgrade	0.8
Express seating upgrade	1.8
First class seating upgrade/ power	1.9
Panel upgrade	1.4
PIS passenger info system, including comms backbone upgrade	1.7
Customer amenity upgrades: luggage racks/ coat hooks/ bins	1.1
Toilet refurbishment	0.7
External rebranding/ livery	0.8
Project Management Fees	0.9
Contingency	0.7
	<u>15.7</u>

Commentary:

Stage 1: Agreed the scope of the class 332 fleet re-branding to facilitate a fixed cost programme to deliver the full fleet re-brand of fourteen trains. This provided a clear understanding of the costs to be included in the main business case for the re-brand.

Stage 2: Approval obtained from HAL Board in July 2011. Full implementation of the modernisation project commenced in Q3/4 2011 with final unit rolled out mid-2013.

Cost Benchmark Comparisons:	
Project Name:	Fleet Modernisation
Total Capital Budget (<i>Constant Prices</i>):	
Guidance Notes:	
As part of the project, an expression of interest letter and ITT had been sent out by Siemens to test the market and undertake a high level benchmarking exercise. Three tender responses were received.	
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>	

Header Information

BCT No.	Various
Op No.	Various
Project Name:	Hex Growth Projects

Project Overview, Objectives and Status

Overview:	
Description:	Projects to improve revenue earning opportunities for Heathrow Express
Ref. Drawings / Images: <i>(Refer to Annex A)</i>	None
Objectives:	
HAL:	Increase revenue earning through: <ul style="list-style-type: none"> • Improving customer experience • Make it easier to buy tickets and travel on Hex / Connect services by: <ul style="list-style-type: none"> ○ Exploiting non-fare revenue earning opportunities. ○ Wayfinding improvements to ensure ease of location of HEx network.
Airline:	Improve passenger access to Heathrow Encourage increased use of Heathrow airlines

Project Benefits:

As per above objectives

Status:

Programme:	Project Gateway Stage:
Individual projects to develop revenue return. Including web and e-ticketing technology development, digital advertising infrastructure, signage and customer information systems, communications development, Express TV improvements	Projects at varying stages of completion

Airline Engagement:

From November 2009, engaged through quarterly Rail Stakeholder Programme Boards (RSPB) and subsequently through Surface Access Stakeholder Programme Boards (SASPB).

Project Delivery

Current Control Budget:

Total Capital Budget *(Estimated At Completion)*: Q5: £19,200,000

Refer to Annex B for cost information detail.

Schedule:

Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
-----------------	----------------	---------------------	----------------------------

n/a Various projects	n/a Various projects	n/a Various projects	n/a Various projects
<i>Refer to Annex C for programme information detail.</i>			
Assumptions:			
The following points cover the significant delivery assumptions related to this project;			
<ul style="list-style-type: none"> • Delivery of projects depends on availability of assets, supplier availability, and service scheduling. 			
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>			

Operational Issues

HAL Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Assumptions:		
The following points cover the significant operational assumptions related to this project;		
<ul style="list-style-type: none"> • Each project is evaluated on the basis of its revenue return on capital spend. 		

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Assumptions:		
The following points cover the significant operational assumptions related to this project;		
Impacts on airlines considered/ discussed as part of capital disclosure for the RSPB meetings.		

Average Asset life:	
Average Asset Life:	4+ Years
Commentary:	
Asset lives in this section vary from 4 years upwards.	
<i>Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.</i>	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	
Commentary:	
None.	
<i>Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only.</i>	

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project.
None

Annex B: Project Delivery: Cost Information:

Project Information

Project Name: Hex Growth
BCT No.: Various

Cost Information

Key growth projects in Q5 include the following:

PROJECT	OP PROJECT NO.	£m
Customer Information System	30153	2.0
Digital Conversion escalators	24456	1.7
Connect 4tph	24298	1.3
Wireless upgrade (on-board).	tba	1.3
HHT renewals (incl. E-ticketing)	23686	1.1
HHT upgrades	tba	1.0
Kiosks installation - stations (inc LUL), CTA, airside	tba	1.0
T5 Strategic Spares	23212	0.8
T5 Signage	23650	0.7
Internet site upgrade (New Web Platform)	24383	0.7
Commidea - TOM upgrade for PCI compliance	30151	0.6
CMS- Process Mapping system	24037	0.5
Growth Projects - provision for future projects	tba	0.5
Media server upgrade - Express TV	25690	0.5
Express TV - screen renewal	23832	0.5
NFR - Sidetrack	24190	0.4
Competence Management system	23581	0.4
HR database	22466	0.4
Estate rebranding	30363	0.4
Energy efficiency improvements -High Bay Lighting	23534	0.4
Provide accomodation for T5 operations	22288	0.3
PCI Security system	24382	0.3
T5 Water Ingress - tunnel seal improvement	24039	0.3
Other smaller projects		2.2
		19.2

Commentary:

Growth projects are designed to increase revenue earning through Improving customer experience; make it easier to buy tickets and travel on Hex / Connect services; Exploit non fare revenue earning opportunities; Signage improvements to ensure ease of location of HEx network; improve passenger access to Heathrow; and, encourage increased use of Heathrow airlines

Cost Benchmark Comparisons:	To be included in CIP 2013 Publication
Project Name:	HEx Growth
Total Capital Budget (<i>Constant Prices</i>):	£19,200,000
Guidance Notes:	
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>	

Header Information

BCT No.	Various
Op No.	Various
Project Name:	HEx Asset Replacement

Project Overview, Objectives and Status

Overview:	
Description:	Projects to renew Heathrow Express rail assets through Major Replacement/ renewal.
Ref. Drawings / Images: <i>(Refer to Annex A)</i>	None
Objectives:	
HAL:	<ul style="list-style-type: none"> Maximise useful asset lives Ensure asset availability and reliability is maximised Protect customer experience Minimise on-going cost of maintenance through proactive identification replacement needs
Airline:	<ul style="list-style-type: none"> Maintain/ improve passenger access to Heathrow Encourage increased use of Heathrow

Project Benefits:

As per above objectives

Status:

Programme:	Project Gateway Stage:
Replacement / renewal of key strategic and operational rail assets and elements of assets such as Rolling stock, infrastructure (signalling, track, points), stations & buildings, depot, and where they have reached the end of their useful lives or are no longer providing an acceptable reliability / availability to HEx and Connect service.	Individual projects at varying stages of completion

Airline Engagement:

From November 2009, airlines have been engaged through quarterly Rail Stakeholder Programme Boards (RSPB) and subsequently through the Surface Access Stakeholder Programme Boards (SASPB).

Project Delivery

Current Control Budget:

Total Capital Budget *(Estimated At Completion)*: Q5: £30,400,000

Refer to Annex B for cost information detail.

Schedule:

Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
n/a Various projects	n/a Various projects	n/a Various projects	n/a Various projects

Refer to Annex C for programme information detail.

Assumptions:
The following points cover the significant delivery assumptions related to this project;
Delivery of replacement projects depends on availability of assets, suppliers, and service scheduling.
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>

Operational Issues

HAL Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Assumptions:		
The following points cover the significant operational assumptions related to this project;		

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Assumptions:		
The following points cover the significant operational assumptions related to this project;		
None.		
Average Asset life:		
Average Asset Life:	Various	
Commentary:		
Asset lives in this section vary from 4 years (mechanical elements) to 50+ years (tunnel infrastructure).		
<i>Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.</i>		
Impact on User Charges:		
Estimated Per Passenger Cost Impact:	N/A	
Commentary:		
None.		
<i>Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only.</i>		
Non Construction Risk:		
The following points cover any significant areas of risk for the Airline Community regarding this project.		
None		

Annex B: Project Delivery: Cost Information:

Project Information

Project Name: Hex Asset Replacement
BCT No.: Various

Cost Information

Key renewal projects in Q5 include the following:

PROJECT	OP PROJECT NO.	£m
Class 332 Door overhaul	23594	2.8
Bodyside Laminated windows	30094	1.8
Traction Power Cable Replacement	30097	1.4
Fleet overhaul - M&E	17522	1.3
Door Leaf Windows/ Plates	30086	1.0
Fire System renewal	30093	1.0
T5 Glass Floor Replacements	24321	0.9
Fleet overhaul- 1.3m mile	24954	0.9
Water Ingress Management	30411	0.9
Vent attenuator replacement - T5	tba	0.9
Door Pillar replacement	30095	0.8
332 Refresh	22286	0.8
Class 332 Gangways	25577	0.7
Spares (Overhaul)	30096	0.6
332 Exterior Door Button	24521	0.6
Asset Life Extension Project	25575	0.6
T4 Lift works	tba	0.6
Building Asset Upgrade/ Undercroft	25574	0.5
Class 332 Batteries	25576	0.5
Fleet Winterisation	25895	0.5
Fleet 'soft interior' refurbishment	24955	0.5
Depot Gantry	tba	0.5
Drum Switch replacement	tba	0.5
CTA Lift works	tba	0.5
Asset Replacement projects	tba	0.5
Vent Fan and dampers	24409	0.5
Fleet External Presentation	24402	0.5
Cab environment replacement/ improvement	30148	0.4
S&C / Rail/ signal renewals, includes conversion to LED signals in 2009	22284	0.4
Fleet Improvement Projects	tba	0.4
HVAC Tray renewal	25074	0.3
G011 traction card replacmt	24620	0.3
Fire Detection and Alarm system	24410	0.3
Contract Mobilisation assets	24674	0.3
GSM-R	24320	0.3
332 Compressor overhaul	30087	0.3
332 Coupler electrical box replacement	30248	0.3
Track Slab Repairs/ replacements	24366	0.3
Structural Repairs (based on GL Hearne Report)	23580	0.3
LED Signalling conversion in tunnel	tba	0.3
Back Office upgrade - security	30362	0.3
Lift & Escalator bearings	30473	0.3
Tunnel ingress - Shep lane: Mgmt system	30150	0.3
Stations - Back of House & Access	30247	0.3
Depot Buildings refurbishment	24457	0.3
Other smaller projects		2.1
		30.4

Commentary:

Maximise useful asset lives; ensure asset availability maximised; protect customer experience; minimise on-going cost of maintenance through proactive identification replacement needs; maintain/ improve passenger access to Heathrow; encourage increased use of Heathrow.

Cost Benchmark Comparisons:	
Project Name:	HEX Renewal
Total Capital Budget (<i>Constant Prices</i>):	£30,400,000
Guidance Notes:	
<i>Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.</i>	

Appendix I: Equitable Treatment Metrics

	Measurement	Definition	Terminal 1		Terminal 2		Terminal 3		Terminal 4		Terminal 5		Notes
			Current	Mplan-Intention*	2014	Mplan-Intention*	Current	Mplan-Intention*	Current	Mplan-Intention*	Current	Mplan-Intention*	
1.0 Traffic	1.1 MPPA	Million Passengers Per Annum (MPPA) - defined as quantum of total passengers served in each terminal per annum. Calculation: - for existing terminals based on an annual terminal throughput for a last calendar year - for new terminals calculated as sum of airlines' (who are planned to occupy a new terminal) annual throughput for a last calendar year	13.5		15.8		18.6		9.8		26.1		Data from BOSS 2012 - T2 calculated using figures from expected airline tenants in 2012, note excludes Virgin domestic operation due to no historic data
	1.2 ATMPA	Air Traffic Movements (ATMs) per annum - defined as quantum of aircraft movements in each terminal per annum. Calculation: - for existing terminals based on air traffic movements in each terminal for a last calendar year - for new terminals calculated as sum of aircraft movements for all airlines (who are planned to occupy a new terminal) for a last calendar year	120,044		115,320		95,416		60,071		193,539		Data from BOSS 2012 - T2 calculated using figures from expected airline tenants in 2012, note excludes Virgin domestic operation due to no historic data
	1.3 Peak hour departing flow - all pax	Peak Hour Passengers - number of enplaning and deplaning passengers (including transfer passengers) served in each terminal counted as 30th peak hour (clock hour) of the last calendar year	2,684 (ATD) 2,491 (STD)		3,550 (ATD) 2,570 (STD)		4,847 (ATD) 4,714 (STD)		2,855 (ATD) 2,583 (STD)		5,398 (ATD) 4,289 (STD)		Clock Hour ATD and STD figures used for 2012, T2 figures use 2012 data for airlines expected to use T2 excluding Virgin domestics
2.0 Terminal area - total	2.1 Terminal, campus GFA (sqm)	Terminal, campus GFA (Gross Flow Area) - floor area inside the building envelope, including the external walls, and excluding the roof. For terminal or campus it is calculated as a sum of GFAs for all levels and all piers and satellites. In case, there is an external building which process either passengers or baggage for particular terminal, but it is not a part of main terminal or satellite structure, then area of this building should be added to main terminal / campus area.	199,250		297,900		222,700		132,300		526,000		Rounded to nearest 100m2. Terminal 1 excludes T2B, T2 does not assume TTS i.e. walkway included. T2 includes T2A & T2B, T5 includes T5A, B & C

	Measurement	Definition	Terminal 1		Terminal 2		Terminal 3		Terminal 4		Terminal 5		Notes		
			Current	Mplan Intention*	2014	Mplan Intention*	Current	Mplan Intention*	Current	Mplan Intention*	Current	Mplan Intention*			
3.0 Passenger Infrastructure	3.1	Number of check-in desks & bagdrops	For each terminal sum of all check-in desks and bagdrops which have connection to baggage system.		114		116		217		127		150		Check-in desk numbers as per S13 CAT allocations for T1, T3 and T4
	3.2	Number of self service kiosks	For each terminal sum of all self service units (either check-in or transfer)		72		60		89		49		96		updated based on info received from Terminal Integrated planners (26MAR13), only includes active kiosks
	3.3	Number of security lanes (machines)	For each terminal sum of all security lanes (departure and transfer) which are used for passengers processing. Security machines dedicated for staff processing are not included.		22		29		25		18		26		There are plans to extend T3 and T4 central search areas
	3.4	Number of ticket desks (total)			53		54		81		56		26		This figure excludes 'Check in desks' that are being used as 'Ticketing/Assistance/Upgrade desks'. Counts individual serving positions.
	3.5	Number of immigration lanes + ACS	For each terminal sum of all immigration lanes and ACS lanes (arrivals and transfer) which are used for passenger processing.		38		44		46		42		41		Immigration lanes exclude ACS+
	3.6	Published intra-terminal MCT	Published intra-terminal MCT for each terminal. If there is a different MCT for different flows, then separate MCTs should be indicated for each flow.		60mins		-		70mins		60mins		60mins		MCT reflects both passenger and baggage processes
	3.7	Distance to walk unaided from IDL to furthest aircraft gate (m)	Unaided walking distance measured from central security search exit to the furthest aircraft gate either in terminal building or satellite. All aids such as sidewalks, elevators, escalators, people mover systems are excluded. Distance for each terminal should be presented on drawings.		610		915		855		730		450		Rounded to nearest 5m, T2 not assumed to have TTS
	3.8	Number of CIP Lounges available (total)			6		-		11		6		4		
3.9	Number of CIP Lounges requested			0		6		2		1		1			
4.0 Baggage Infrastructure	4.1	Length of reclaim belts	For each terminal sum of re-claim belts' length (in meters) which is presentable to passengers, length of feeds to the belts is excluded; both domestic and international.		408		706		724		443		718		
	4.2	Number of MUPs	Number of MUPs (make-up) positions in each baggage hall (both departures and transfer)		185		0		250		155		330		Only currently usable MUPs have been included
	4.3	ADP (avg time to input belt - arrivals)	Arrivals Delivery Performance for departure baggage - measured as average for first bag (FB), last bag (LB) and % in target		LB ADP 87% in 35min		(FB) 85% of flights in 15min, (LB) 85% of flights in 35min		LB ADP 76% in 35min		LB ADP 67% in 35min		LB ADP 72% in 35min		Source: Merlin data, Feb '12 to Feb '13, T2 is target performance
	4.4	ADP (avg time to input belt - transfers)	Arrivals Delivery Performance for transfer baggage - measured as average for transfer bags and % in target		Tx avg 21mins, Tx ADP 75%		85% of bags in 25min		Tx avg 25mins, Tx ADP 61%		Tx avg 25mins, Tx ADP 57%		Tx avg 24mins, Tx ADP 61%		Source: Merlin data, Feb '12 to Feb '13, T2 is target performance

	Measurement	Definition	Terminal 1		Terminal 2		Terminal 3		Terminal 4		Terminal 5		Notes
			Current	Mplan Intention*	2014	Mplan Intention*	Current	Mplan Intention*	Current	Mplan Intention*	Current	Mplan Intention*	
5.0 Aircraft Infrastructure	5.1	Number of aircraft stands (centrelines)	32		33 (35 in 2016)		47 (192L & 192R counted as two small stands)		35		60		Declared physical stand supply for summer 2013
	5.2	Number of pier served aircraft stands (centrelines)	28		25		31		21		45		Physical stand supply
6.0 Terminal access	6.1	Number of car park spaces	MSCP1: 585 MSCP1a: 1,670		1,340		1,540		898		3,580		T5 MSCP is also utilised by staff
	6.2	Walking distance (m) to check-in area from underground	295		565		405		45		140		Rounded to nearest 5m
	6.3	Walking distance (m) to check-in area from HEX	105		310		185		120		80		Rounded to nearest 5m
	6.4	Walking distance (m) to check-in area from public bus	310		370		500		125		165		Rounded to nearest 5m

*Masterplan figures will be populated with the expected facilities at 2019, once the Q6 regulatory settlement has been concluded.

Appendix J: Cost Schedule

Heathrow Airport Limited		Actuals/Forecast Outturn (Capital as Artemis)						
Q5 Capital Investment Programme as at 5CBP 2013		08/09	09/10	10/11	11/12	12/13	13/14	TOTAL
BCT	Project Name							
HEATHROW TOTAL		739,700,418.00	804,300,223.00	812,000,000.00	963,500,052.00	1,209,701,158.00	1,367,668,840.30	5,896,870,691.64
BAA IT		11,170,295.00	43,903,529.00	42,568,427.00	30,877,472.00	31,010,198.00	57,000,000.00	216,529,921.34
BAA RAIL		13,054,570.00	14,492,000.00	9,521,000.00	16,032,200.00	11,902,637.00	11,000,000.00	76,002,407.00
HAL Capital Projects		693,062,076.00	680,413,489.00	708,358,064.00	881,512,177.00	1,127,388,014.00	1,292,989,655.00	5,383,723,475.00
Non-Original CIP Works		18,288,697.00	3,238,206.00	613,264.00	20,958,065.00	19,079,938.00	13,899,367.00	76,077,537.00
Thames Water		900,000.00	39,240,000.00	-	-	-	-	40,140,000.00
Surface Access		-	-	-	-	3,000,000.00	3,000,000.00	6,000,000.00
PSDH		-	20,453,000.00	52,100,000.00	24,200,000.00	5,640,371.00	3,000,000.00	99,393,371.00
Adjustments		3,224,780.00	2,559,999.00	-1,160,755.00	-10,079,862.00	11,680,000.00	-7,220,181.70	996,019.70
Q6 Portfolio		-	-	-	-	1,518,031.00	17,481,969.00	19,000,000.00
10792	Q6 Design Allowance	-	-	-	-	1,518,031.00	17,481,969.00	19,000,000.00
T2 Total		37,108,805.00	75,288,300.00	268,872,322.00	573,772,869.00	767,848,593.00	776,470,372.00	2,499,361,261.00
8784	T2 Leadership	4,137,942.00	6,406,934.00	4,178,928.00	14,794,908.00	19,911,636.00	46,518,249.00	95,948,597.00
8786	T2 Logistics	1,388,527.00	6,741,039.00	6,409,753.00	14,479,994.00	20,406,020.00	41,647,402.00	91,072,735.00
10362	T2 Commercial Building	-	-	-	-	3,300,468.00	8,801,161.00	12,101,629.00
10702	T2 Intellectual Projects	-	-	-	-	-	170,005.00	170,005.00
9853	T2A Baggage	-	-	14,155,420.00	132,283.00	175,074.00	597,592.00	13,865,185.00
9351	T1 Baggage Prolongation Programme	-	296,190.00	20,836,397.00	31,442,981.00	13,464,290.00	3,665,621.00	69,705,479.00
10309	T2 Phase 1 Baggage	-	-	1,930,284.00	11,108,750.00	42,484,121.00	54,639,354.00	110,162,509.00
8802	T2A Building and Stands	24,711,965.00	43,688,334.00	110,105,325.00	280,429,453.00	336,102,283.00	338,505,410.00	1,153,542,770.00
4201	T2B Phase 2	6,670,371.00	14,997,628.00	32,339,403.00	176,955,857.00	186,313,156.00	106,381,293.00	582,757,708.00
7206	T2B Apcon	-	853,295.00	700,259.00	1,172,952.00	24,888,827.00	33,027,927.00	60,643,260.00
10856	T2B Phase 3	-	-	-	-	-	1,584,169.00	1,584,169.00
9805	T2 ICS	-	-	14,507,414.00	21,033,402.00	36,905,935.00	52,305,653.00	124,752,404.00
3814	MSCP 2	200,000.00	2,304,880.00	2,593,130.00	19,158,299.00	58,336,398.00	78,180,375.00	160,773,082.00
8888	Control Tower Demolition	-	-	827,278.00	9,056,203.00	496,278.00	-	4,379,759.00
9723	T2 Ancillary Accommodation	-	-	2,883,731.00	907,787.00	4,981,260.00	9,498,342.00	15,676,120.00
10820	CTA Potable Water Supply	-	-	-	-	82,837.00	2,143,013.00	2,225,850.00
Capacity Optimisation Total		-	553,474.00	3,992,274.00	9,980,976.00	33,391,993.00	98,483,889.00	146,402,606.00
9501	Heathrow Resilience	-	540,324.00	1,343,637.00	4,218,173.00	15,572,585.00	13,354,070.00	35,028,789.00
3871	Baggage Combined Control Centres	-	-	108,986.00	271,851.00	162,631.00	5,956,530.00	6,499,998.00
10749	Airside Operational Building	-	-	-	-	-	9,000,002.00	9,000,002.00
10708	Q6 CO Intellectual Works	-	-	-	-	57,280.00	892,720.00	950,000.00
9508	Pier 5 A380 Stands	-	-	155,005.00	948,735.00	4,901,841.00	100,242.00	6,105,823.00
9640	MSCP4 Structural Relife	-	13,150.00	2,384,646.00	2,733,572.00	221,623.00	-	5,352,991.00
3841	Western Campus A380 Stands	-	-	-	194,076.00	809,267.00	1,834,829.00	2,838,172.00
10841	T3 Connections Security	-	-	-	-	403,617.00	136,383.00	540,000.00
10857	T3 Additional PCA Infrastructure Project	-	-	-	-	22,292.00	4,977,709.00	5,000,001.00
10803	T5 CTA and Domestic Capacity	-	-	-	-	159,421.00	1,597,648.00	1,757,069.00
10434	Airline Individual Moves	-	-	12,468.00	-	303,457.00	82,060.00	397,985.00
10377	T4 ABF 1-75 (Phase 2)	-	-	-	438,071.00	2,862,391.00	1,876,539.00	5,177,001.00
10406	Aviation Fuel Infrastructure	-	-	-	302,760.00	396,859.00	2,308,249.00	3,007,388.00
10429	T4 Baggage Reclaim Hall Expansion	-	-	-	-	183,634.00	1,396,750.00	16,942,388.00
10448	T5 TIS Enhancements	-	-	236,005.00	2,647,345.00	26,687,675.00	29,571,025.00	29,571,025.00
10495	Stands Infrastructure	-	-	215,515.00	2,730,732.00	1,314,500.00	4,260,747.00	8,306,994.00
10549	T4 ABF Building Works	-	-	226,616.00	436,546.00	269,051.00	932,213.00	1,644,426.00
10852	T3 Pier 5 Capacity Phase 2-3	-	-	-	-	166,326.00	7,944,994.00	8,111,320.00
10802	Loading Bay Enhancements T3 & T4	-	-	-	-	-	1,320,000.00	1,320,000.00
10804	Sierra Taxiway Code F to 27L	-	-	-	-	141,030.00	1,828,280.00	1,969,310.00
Programme Identification Total		743,930.00	1,054,630.00	624,807.00	6,668,374.00	13,355,613.00	80,271,008.00	30,468,432.00
7720	T2A Phase 2	743,930.00	1,054,630.00	348,284.00	687,000.00	5,419,911.00	9,077,804.00	9,161,559.00
7664	T2A Ph2 Baggage System	-	-	276,523.00	441,789.00	34,807.00	-	683,505.00
8818	Baggage Product Improvements	-	-	-	74,780.00	8,791.00	-	83,571.00
10788	T2 Pier 6 Connector	-	-	-	-	-	3,000,000.00	3,000,000.00
10440	Q6 Strategy/Western Campus D&D	-	-	-	2,124,968.00	132,787.00	-	2,257,755.00
10472	Post Q6 Solutions D&D Studies	-	-	-	3,339,837.00	7,846,513.00	4,113,274.00	15,299,624.00
Western Baggage Product Total		42,370,585.00	106,748,467.00	100,344,549.00	126,740,534.00	163,388,897.00	138,151,437.00	677,744,469.00
3801	T3 Integrated Baggage System	6,091,087.00	18,180,277.00	23,478,747.00	69,250,135.00	124,089,372.00	85,828,643.00	326,918,261.00
1891	Pier 15 Truncated Baggage System	36,279,498.00	88,568,190.00	74,868,595.00	35,102,564.00	4,387,994.00	401,236.00	239,698,127.00
10094	T3 HBS Replacement	-	-	1,907,207.00	15,295,504.00	12,775,933.00	759,329.00	30,737,973.00
10376	T4 Baggage Annals	-	-	396,275.00	1,612,158.00	673,961.00	2,682,394.00	5,364,888.00
10561	T4 Call Forward Automation	-	-	-	52,721.00	100,789.00	446,491.00	600,001.00
10827	Western Baggage Product Airline Occupancy	-	-	-	-	87,689.00	212,312.00	300,001.00
10848	Standard 2 HBS Software Upgrades	-	-	-	-	-	586,000.00	586,000.00
10750	Enterprise Service Bus (ESB) Upgrade	-	-	-	-	113,497.00	1,523,175.00	1,636,672.00
10712	T3B Transfer Docks Relocation	-	-	-	1,221,683.00	13,278,313.00	14,499,596.00	14,499,596.00
9692	Heathrow Integrated Baggage System (HIBS)	-	-	-	6,431,107.00	2,140,827.00	-	8,571,934.00
10683	WBP Intellectual Projects	-	-	-	928,018.00	9,392,456.00	10,320,474.00	20,639,948.00
10632	T3 SCADA	-	-	-	42,573.00	5,422,235.00	1,114,403.00	1,671,201.00
10696	T3 Lina 18	-	-	-	40,957.00	59,035.00	-	99,992.00
10658	T5 Western Baggage Upgrade	-	-	162,199.00	6,962,276.00	10,224,793.00	17,349,268.00	24,689,526.00
10663	T5 Bag Check	-	-	20,489.00	689,640.00	37,133.00	-	747,262.00
10662	T5 Early Bag Store Capacity Increase	-	-	-	504,563.00	7,712,603.00	-	8,217,166.00
10378	HBS OCL & RAP7 - HBS	-	-	-	5,856,960.00	1,053,769.00	138,553.00	7,649,282.00
10545	T4 APV HBS Replacement	-	-	-	94,350.00	374,490.00	3,681,159.00	4,149,999.00
10606	T5 Can Store Relocation	-	-	-	425,807.00	882,659.00	-	1,308,466.00
Portfolio of Projects Total		5,097,490.00	32,066,318.00	95,490,767.00	87,502,821.00	44,376,836.00	106,153,120.00	370,687,352.00
3428	CO2 Strategy	-	500,000.00	2,105,423.00	728,253.00	107,905.00	58,419.00	3,500,000.00
7666	Energy Infrastructure	130,576.00	1,488,053.00	6,528,738.00	27,905,672.00	9,746,327.00	795,672.00	46,995,038.00
7205	T2B NW Stands & Taxilanes	1,025,572.00	11,084,711.00	33,014,885.00	1,055,463.00	-	-	36,180,631.00
4202	Eastern Campus Airfield Taxiways and Road	1,901,896.00	1,368,934.00	29,919,695.00	12,591,591.00	2,857,880.00	136,816.00	48,776,812.00
3353	Major Fire Appliance Replacement	-	34,136.00	-	2,380,939.00	1,486,225.00	2,116,955.00	6,018,255.00
4185	VIP Infrastructure	94,985.00	238,887.00	1,348,383.00	1,166,360.00	272,367.00	2,434,169.00	5,555,151.00
6452	Control Post Programme	585,864.00	1,769,819.00	15,613,980.00	9,887,372.00	2,564,348.00	241,006.00	30,662,389.00
3803	Runway Rehabilitation Project	-	-	-	581,044.00	4,198,517.00	29,889,630.00	34,669,181.00
6783	Heathrow Storm Water Catchment	30,326.00	149,499.00	5,865,337.00	1,482,924.00	3,601,871.00	6,360,914.00	17,490,871.00
7718	Eastern Maint Base Reviev	445,483.00	428,793.00	764,086.00	893,273.00	2,882,546.00	765,516.00	6,179,697.00
9301	Tunnels Refurbishment	-	1,121,527.00	3,857,886.00	2,733,856.00	5,879,464.00	10,786,293.00	24,379,026.00
9843	Low Cost Security Projects	-	1,134,908.00	2,437,333.00	972,436.00	1,441,292.00	1,734,590.00	7,720,559.00
9382	PicoEx Station Works - LUL	-	3,057,539.00	1,728,342.00	15,296,794.00	77,769.00	-	20,160,444.00
9725	Remove Fowles Yard	-	8,500.00	117,221.00	817,412.00	1,391,998.00	17,896.00	2,393,027.00
9721	Landside Road Safety Compliance	-	-	20,303.00	-	134,541.00	505,843.00	2,235,723.00
8857	Tax							

Q5 Capital Investment Programme as at SCBP 2013

BCT	Project Name	08/09	09/10	10/11	11/12	12/13	13/14	TOTAL
10664	Proof of Concept Self Bag Drop	-	-	-	1,639,790	5,916,159.00	5,906,841.00	13,462,790.00
7049	JCD Media Sites	2,027,053.00	818,553.00	162,177.00	67,445	306,669.00	-	3,381,897.00
4242	Self Service Border Control	235,000.00	4,126,936.00	2,894,675.00	1,664,721	1,777,451.00	850,444.00	7,994,325.00
9106	New Model Line (formerly ATRS)	73,289.00	236,075.00	69,149.00	1,590,574	7,680,339.00	20,255,371.00	29,904,797.00
10847	Premium Security Fast Track	-	-	-	-	162,961.00	10,799,815.00	10,962,776.00
10834	Replacement of VIP Booking System	-	-	-	-	157,994.00	122,726.00	280,720.00
10850	Liquids Profiling	-	-	-	-	-	100,000.00	100,000.00
10807	HVAC Compliance	-	-	-	-	-	1,760,001.00	1,760,001.00
10809	PRM Rooms	-	-	-	-	-	880,000.00	880,000.00
10996	Wayfinding Strategy Initiative	-	-	-	126,010	5,126,658.00	4,831,523.00	10,084,191.00
10958	Roller Cocks Project	-	-	-	50,102	52,822.00	876,485.00	979,409.00
10992	Q5 TRM Intellectual Works	-	-	-	-	224,390.00	6,875,610.00	7,100,000.00
10684	PRM Assistance Call Points	-	-	-	-	58,197.00	141,806.00	200,003.00
7540	T3 Office Refurbishment Airline Moves (No CIP 2007 Provision)	5,841,277.00	971,949.00	176,465.00	-	-	267,845.00	6,904,606.00
8563	Immigration Hall Refurb	521,534.00	2,190,767.00	12,050,389.00	6,127,850	76,864.00	-	20,967,404.00
9223	T3 Connections Security SQR	-	1,038,362.00	6,921,415.00	639,399	6,977.00	55,085.00	8,647,284.00
9648	T3 UKBA Watch House & SC15 Accommodation	-	-	175,871.00	1,801,547	47,961.00	-	1,929,457.00
9653	T3 IDL Transformation	-	40,549.00	1,316,104.00	2,957,605	448,265.00	31,803.00	4,794,326.00
9654	T3 Check in Enhancements	-	-	-	236,526	965,756.00	1,505,468.00	2,707,750.00
10711	T3 Refurbishment Programme	-	-	-	-	736,581.00	15,671,692.00	16,408,273.00
10959	PRM Lifts	-	-	-	-	129,988.00	6,235,214.00	6,365,202.00
10554	T3 South Wing HVAC Replacement	-	-	-	-	53,605	3,757,942.00	3,811,547.00
10643	T3 Check in Zone A&B Porches	-	-	-	-	989,727.00	412,888.00	1,402,615.00
10652	T3 CIP Lounge Remedial Works	-	-	-	59,900	650,620.00	4,764,451.00	5,474,971.00
9399	T4 Baggage Airline Moves - T407	-	1,338,098.00	2,983,994.00	547,967	-	-	4,870,059.00
9644	T4 Departures Phase 2	-	-	323,905.00	3,690,059	14,611,559.00	2,864,474.00	21,489,997.00
9646	T4 Cat B Accommodation	-	-	224,016.00	677,133	1,168,588.00	65,310.00	2,135,047.00
9644	T4 Airbridge Replacement	-	-	264,724.00	641,124	5,485,328.00	6,813,696.00	13,204,872.00
10822	T4 NE Gate Area Reconfiguration	-	-	-	-	451,529.00	1,751,913.00	2,203,442.00
10366	T4 Baggage Reclaim Hall (R1-R7) Fit Out	-	-	-	5,926,386	1,881,084.00	71,179.00	7,878,649.00
5221	Heathrow Terminal T5C	92,443,042.00	139,122,355.00	98,944,681.00	8,490,440	204,730.00	162,221.00	339,367,469.00
9575	T5 CSA and Connectors Capacity	-	450,000.00	4,763.00	2,669,326	4,924,867.00	311,669.00	8,351,039.00
10816	T5 Gate Loxly	-	-	-	-	195,487.00	4,654,514.00	4,850,001.00
10917	Onward Travel Information Zone	-	-	-	-	59,842.00	40,157.00	99,999.00
10808	T5 Landside Lifts	-	-	-	-	-	373,774.00	373,774.00
10323	T5 North CSA Improvement	-	-	-	633,780	177,220.00	-	811,000.00
10641	T5 A380 GIDs	-	-	-	-	565,432.00	140,841.00	706,273.00
10705	T5C Airbridges - 3rd Jettes on Remaining A380 Stands	-	-	-	-	-	2,040,179.00	2,040,179.00
6527	HAL Mirror Projects (incl Retail & Property)	22,697,454.00	9,791,981.00	1,641,402.00	113,744	46,729.00	-	34,197,852.00
9738	2010 LPI Works	-	460,000.00	17,672,238.00	1,377,145	244,839.00	-	19,754,222.00
10833	Asset Replacement - Property	-	-	-	-	-	2,500,000.00	2,500,000.00
10824	Passenger Toilets	-	-	-	-	-	2,500,000.00	2,500,000.00
10826	Terminal Ambience	-	-	-	-	-	2,500,001.00	2,500,001.00
10826	Asset Replacement	-	-	-	-	276,116.00	26,123,884.00	26,400,000.00
10571	T5C Mirror Works	-	-	-	296,866	653,177.00	265,539.00	1,215,582.00
10232	2011 - 2012 Mirror Projects	-	-	546,504.00	19,856,153	36,415,503.00	4,757,474.00	61,570,634.00
10295	Retail Concessions	-	-	-	330,932	746,388.00	2,000,000.00	3,077,320.00
10296	Retail Services	-	-	-	172,231	777,769.00	2,694,000.00	3,644,000.00
Legacy Total		483,902,617.00	304,116,675.00	93,023,329.00	14,408,243	8,621,552.00	154,270.00	904,226,686.00
9999	Capital Programme Reserve	21,038,379.00	5,000,000.00	-	-	-	-	16,038,379.00
9356	HBS Replacement	-	911,648.00	911,647.00	22,614	-	-	22,615.00
8020	Tug Chasing & Stilage	-	849,176.00	12,907.00	-	-	-	836,269.00
7966	Operational Readiness	3,337,835.00	3,062,073.00	119,723.00	3,600	-	-	6,283,785.00
7702	Relocation of Airlines IT Operations	6,825,752.00	4,438,638.00	699,513.00	539,463	116,555.00	-	12,386,811.00
7541	T4 Post T5 Baggage Operation	2,059,068.00	1,694,942.00	-	30,000	-	-	3,784,010.00
7506	Building 139 One World	7,894,102.00	11,244.00	21,599.00	9,830	8,456.00	-	7,945,225.00
9636	T2A VP - HMRC Decarts	1,795,041.00	93,381.00	-	-	-	-	1,888,422.00
9604	T4 Airline Relocation	4,277,975.00	8,106,527.00	563,778.00	21,523	-	-	12,949,803.00
6596	MSCP2 Protection works	192,895.00	27,410.00	17,424.00	-	-	-	202,881.00
6100	T2A Early Stage Cost	6,368.00	-	-	-	-	-	6,368.00
3788	Managed Campus - OCTV	-	-	87,769.00	-	-	-	87,769.00
3656	T3 Forecourt Redevelopment	1,871,529.00	79,371.00	17,637.00	-	-	-	1,933,263.00
3519	Chilled Water Expansion	-	34,739.00	-	-	-	-	34,739.00
3212	North East Taxiways	30,442.00	260,232.00	-	191,452	-	-	99,222.00
2303	T4 A380 Stand/Gate Provision	20,335,911.00	3,439,057.00	755,033.00	-	-	-	23,019,935.00
2016	T1 Departures Lounge Development	1,971.00	-	-	1,971	-	-	-
1832	Cargo Tunnel Refurbishment	12,190.00	12,190.00	-	-	-	-	24,380.00
7257	T3 Wayfinding Signage	12,731.00	-	-	-	-	-	12,731.00
6476	T3 Kerbside check in	20,000.00	602,530.00	-	-	-	-	582,530.00
6714	T3 Refurbishments	-	119,465.00	-	6,847.00	238	-	123,380.00
7047	HEX Media Sites	750,000.00	750,000.00	-	98,580.00	-	-	98,580.00
5296	BS - T4 Operations Network	265,691.00	2,381.00	1,657.00	-	-	-	266,415.00
4611	P20486 - Cargo CHRTS LTHW link	20,865.00	11,250.00	-	-	-	-	9,615.00
7888	T3 CIP New Airline Moves (No CIP 2007 Provision)	7,519,370.00	241,485.00	239,658.00	391,361	12,290.00	-	7,924,848.00
3798	T4 Sorter Replacement	4,572,758.00	3,675,831.00	436.00	-	-	-	8,248,153.00
8628	Eastern Campus EIS	378,668.00	1,916,428.00	1,474,868.00	-	15,840.00	71,206.00	3,825,330.00
4119	Reconfiguration of stand 240/242	631,906.00	-	69,897.00	-	-	-	562,009.00
7769	P32324 - T2A L/S Early Services Relocation	15,930,397.00	4,034,175.00	270,072.00	25,164	-	-	20,209,480.00
3876	T3 Pier 7 Horizontal Segregation	3,888,624.00	121,437.00	866.00	-	-	-	3,268,053.00
3851	T4 Check-in Capacity	55,107,659.00	37,974,842.00	592,529.00	307,824	1,040.00	-	92,183,188.00
3296	Post T5 Road Interim Solution	43,463.00	14,367.00	-	-	-	-	29,096.00
2222	A380 Northern CTA Core F/G Tax	-	76,764.00	-	-	-	-	76,764.00
2897	T1 Integrated Lounge Security Search	-	123,625.00	403.00	-	-	-	123,222.00
7767	P23225 - T2A Scheme Design Stage	20,247,592.00	998,022.00	-	-	-	-	19,309,570.00
5054	Pier 5 Departures Walkway	4,704,192.00	757,215.00	301,554.00	-	-	-	5,159,853.00
3657	T3 Southwing Extension	-	-	-	13,948	-	-	13,948.00
3884	T1 Pier 4 Segregation	2,226,983.00	27,767.00	-	-	-	-	2,199,216.00
3810	System Baggage Cx reft T1 - T4	3,897,530.00	661,626.00	561,087.00	129,447	-	-	4,990,796.00
4191	Manual Handling Aids	103,523.00	4,552.00	237,780.00	-	-	-	129,705.00
6006	T5 Integrated DL IT Trail	19,978.00	-	-	-	-	-	19,978.00
7484	Zone A CUIS Installation	393,965.00	-	-	-	-	-	393,965.00
6917	T2A VP - BMI Relocation	2,051,722.00	42,828.00	75,000.00	3,941	75,000.00	-	2,098,491.00
4639	T2B Phase 1	47,283,556.00	50,579,434.00	3,786,928.00	112,892	-	-	101,537,026.00
3817	South East Taxiways	21,964,241.00	27,828,433.00	5,836,963.00	306,524	187,374.00	-	55,135,739.00
8467	Wayfinding	51,699.00	14,162.00	5,089.00	2,041	-	-	68,909.00
8450	Control Tower Site Purchase for MSCP East	46,046,726.00	-	-	-	-	-	46,046,729.00
4243	T1 P4A West Demo & 4 nm JS Str	3,153,655.00	209,224.00	270,559.00	-	55,860.00	55,860.00	3,633,438.00
3768	T3 Transfer Fax Mods	1,113,562.00	3,629.00	1,704.00	332	-	-	1,118,563.00
7150	T3 Zone A Virgin Contribution	917,880.00	-	-	-	-	-	917,880.00
4630	T1 Star Parent Project	7,761,388.00	24,650.00	106,500.00	23,700	56,867.00	-	7,958,971.00
7779	P32323 - T2A A/S Early Services Relocation	1,457,160.00	2,060,398.00	473,429.00	230,419	-	-	3,760,568.00
7050	N1 Car Parking Decking Project	58,294.00	1,223.00	-	-	-	-	57,071.00
6496	Relocation of 10cm Radar	1,143,335.00	-	77,784.00	-	-	-	1,065,551.00
6918	VAA Crew Clearance	3,791,281.00	79,280.00	36,091.00	-	-	-	3,675,910.00
3276	Car Rental Consolidation	50,625.00	8,400.00	-	294,588	-	-	252,363.00
6009	T5 Live Team Costs	2,672,123.00	1,223,608.00	-	-	-	-	3,895,731.00
5056	Physical Parameter Security	2,848,441.00	955,888.00	-	690,943.00	10,549	-	4,484,733.00
7560	T3 Zone B-G Upgrade	10,985,028.00	3,871,594.00	22,813.00	-	-	-	14,833,809.00
7630	Airline Relocations Staff	426,200.00	-	-	-	-	-	

Q5 Capital Investment Programme as at SCBP 2013

BCT	Project Name	08/09	09/10	10/11	11/12	12/13	13/14	TOTAL
6068	T3 Zone A Refit	-	218,765.00	-	-	-	-	218,765.00
7226	T3 Centre Relocation	1,432,484.00	95,891.00	2,246.00	-	-	-	1,526,129.00
6478	T3 CIP Waste Management Facility	6,397.00	-	-	-	-	-	6,397.00
7164	T1 Site Welfare & Site Office facilities	1,461,171.00	342,313.00	-	-	-	-	1,803,484.00
5058	P22629 - BS - Guard Tour	230,798.00	-	-	-	-	-	230,798.00
4677	T4 ESP & Central Search Upgrad	2,501.00	-	-	-	-	-	2,501.00
7609	Virgin Arrivals	21,119.00	33,107.00	-	872	-	-	12,860.00
7212	Relocation of Substation 56	2,200,589.00	1,298,862.00	74,808.00	-	-	-	3,424,643.00
9657	T5C Weather Proof BA Baggage Docks	-	-	99,464.00	-	-	56.00	99,408.00
6546	Four Sewer project	351,418.00	-	401,185.00	-	-	-	49,767.00
8009	T4 Open Skies Landside Offices	178,601.00	95,952.00	-	-	3,163	-	79,486.00
7758	EAA Fuel Facility	14,600.00	41,122.00	43,371.00	-	-	-	12,351.00
8406	Pier 7 Connector Refurb	5,477,297.00	5,874,699.00	310,025.00	-	-	13,869.00	11,028,102.00
615	HBS VIVID replacement prog	2,983,592.00	2,351,381.00	-	-	20,270	-	5,314,703.00
9310	T3 Additional Jetty Provision	-	650,269.00	2,041,027.00	78,405	578.00	-	2,770,279.00
1655	Northern Runway Widen Code F	-	-	45,851.00	-	-	-	45,851.00
7227	T2A VP Airside Sec decant	3,689,467.00	226,795.00	56,402.00	-	-	-	3,859,860.00
9397	T4 Baggage Airline Moves - T408	-	1,880,331.00	-	-	-	2,155.00	1,878,176.00
6630	T4 Europcar US/ TSA Requirements	555,424.00	13,332.00	-	-	-	-	542,092.00
4546	F108 Upgrade Programme	-	10,629.00	1,240.00	-	-	-	9,389.00
6330	CSA Security Improvements	-	300.00	-	-	-	-	300.00
5990	South Wing Altra Infill	-	-	-	16,496	-	-	16,496.00
4033	Landside Connectivity TSHAL	24,126.00	-	-	-	-	-	24,126.00
7229	T2A VP - B941 F1 Out	10,146.00	20,818.00	23,375.00	-	-	-	7,589.00
8018	Stretch 464-496	280,292.00	16,913.00	809.00	-	-	-	296,396.00
6042	T5 Live Trials and Studies	13,367.00	-	-	-	-	-	13,367.00
8276	T4 Victor Pier Refurbishment	542,476.00	283,225.00	-	-	-	-	259,251.00
8484	Pier 4 Galerom Enclosures	1,604,424.00	1,137,569.00	168,238.00	2,029	-	-	2,575,794.00
4964	Seacraft Upgrade	2,096,514.00	9,793.00	1,969.00	-	-	354.00	2,108,630.00
7753	Airline Relocations - Cat B fit out - CIP (Arrivals)	2,689,790.00	-	-	-	-	-	2,689,790.00
5225	SE Baggage remediation - Shield	112,164.00	30,045.00	-	-	-	-	82,119.00
9398	T4 Baggage Airline Moves - EBS	-	4,366,096.00	-	-	4,306.00	-	4,361,790.00
8736	T5 Phase 2 Airfield Works	5,754,120.00	8,061,339.00	7,843,987.00	5,590,798	909,521.00	-	28,159,765.00
8806	T2A Baggage	1.00	-	-	-	-	-	1.00
7230	P22848 - Q3 Staff Reef Decant	2,287,385.00	1,376,607.00	26,538.00	-	-	-	3,637,354.00
6708	CSA Security Improvement	65,951.00	1,315.00	-	-	-	-	64,636.00
8516	Landside Departures 1st Floor	65,871.00	550,091.00	3,101,528.00	39,652	11,261.00	-	3,768,403.00
6716	Pier 3 Demolition	867,629.00	889,396.00	1.00	-	-	-	21,766.00
6056	5T HCC Stockley Park	103,133.00	-	-	-	-	-	103,133.00
8401	T4 Baggage Airline Moves - Main Baggage Hall	-	1,858,692.00	11,473.00	1,243	-	-	1,845,976.00
187	Fire Alarm Replacement	83,780.00	71,658.00	-	-	-	-	12,122.00
2809	A380 Taxiways around Pier 1	168,377.00	5,931,577.00	1,357,647.00	-	23,667	-	7,433,934.00
5390	T3 Baggage Capacity - Phase 3	31,758.00	24,000.00	-	-	-	7,457	48,301.00
3822	T1 FCC & Immigration	6,889,117.00	68,592.00	51,343.00	-	203.00	-	6,906,263.00
4168	T3 Virgin Developments	20,155.00	81,475.00	-	-	-	-	61,320.00
6057	T5 Welcome Roundabout	172.00	-	-	-	-	-	172.00
7360	P23463 - Enhanced Cargo Control Posts	93,070.00	-	-	6,913	-	-	86,157.00
6369	HAL Airbridge Refurb 2006/2007	45,997.00	-	-	-	-	-	45,997.00
6645	T1 Pier 3 Segregation	352,037.00	17,573.00	-	-	-	-	334,464.00
6670	T4 FCC Upgrade	177,837.00	16,867.00	-	-	-	-	160,970.00
9028	T4 Additional Transfer Security Lanes	64,319.00	6,843,900.00	67,993.00	-	-	-	6,976,212.00
8402	T4 Baggage Airline Moves - External Works	-	2,321,786.00	-	4,176	-	-	2,325,962.00
7232	BA Workshops Decant	2,800.00	-	-	-	-	-	2,800.00
8807	T2A Phase 1 Stands	105,145.00	621,105.00	837,073.00	6,005	-	-	1,569,328.00
3823	T1 HBS & Transfer Baggage System	11,065,716.00	90,215.00	213,001.00	404,422	872.00	-	11,774,226.00
6060	Retail Capital Contributions	481,000.00	-	-	-	227,202	-	253,798.00
2855	Western Taxiways Rehab	7,641.00	-	-	-	-	-	7,641.00
8403	T4 Baggage Airline Moves - Satellites	-	1,958,223.00	-	45,755	-	-	1,912,468.00
7441	T4 Toilet Refurb 2007 Ph2	79,205.00	43,960.00	2,349.00	-	-	-	125,514.00
8403	P23687 - Security Standardisation	4,043,097.00	4,043,097.00	415.00	-	-	-	415.00
7733	T3 Southwing Facade Upgrade	6,854.00	13,063.00	-	-	-	-	6,209.00
8274	T4 Flooring	970,246.00	56,292.00	-	-	-	-	913,449.00
7233	Dibac Tenant Fit Out	1,070,105.00	754,815.00	6,255.00	-	-	-	1,818,665.00
2781	T5HAL Integration	1,112.00	-	-	-	-	-	1,112.00
149	T3 Arrivals Development	10,775.00	11.00	-	-	-	-	10,764.00
7612	T1 Pier 4A Segregation	2,261,408.00	21,231.00	-	-	-	-	2,240,177.00
7517	HAL Welcome Signage	8,876.00	-	-	-	-	-	8,876.00
7386	P22940 - T2A VP - Specialist Sys Decant	1,039,315.00	227,665.00	10,198.00	972	-	-	1,278,150.00
4070	T1 Arrivals & Departures Refurbishment	31,219,000.00	2,663,000.00	154,500.00	129,789	-	-	33,597,711.00
7463	T2A VP - DVAbs Cas Health	565,227.00	12,429.00	21,781.00	-	-	-	579,437.00
7628	Remote Goods Screening	66,700.00	9,000.00	3,154.00	-	-	-	54,566.00
7633	T3 KBCI AA Contribution	-	601,416.00	-	-	-	-	601,416.00
9278	T4 Transformation Scope Gap 09	-	218,424.00	218,423.00	-	-	-	1.00
6062	T5 New Meids Sites	373,198.00	-	-	-	-	-	373,198.00
5224	T3 Baggage Capacity - Phase 2	392.00	362.00	-	-	-	-	754.00
7206	T2B NE Stands & Taxiways	10,833,576.00	3,626,280.00	17,327.00	150,836	-	-	14,291,693.00
9643	T4 Arrivals Concourse	1,034,178.00	180,648.00	5,885,447.00	174,648	706.00	-	6,241,449.00
7623	T2A VP - T3 Elevating Refit	1,345,328.00	-	44,706.00	-	-	-	2,334,800.00
3516	BS - Performance Mngt 2004	18,956.00	-	-	-	-	-	18,956.00
6944	T1 Displacements	10,061,476.00	1,801,786.00	106,506.00	5,707	-	-	11,751,049.00
5988	T1 - Re-roofing	158,922.00	-	-	968	-	-	157,954.00
8216	T1 Arrivals Forecourt	1,383,056.00	-	-	24,576	-	-	1,358,480.00
8569	T3 Baggage Hall Refit	457,490.00	457,490.00	-	5,621	17,229.00	-	22,850.00
8016	P23388 - T2A VP - Customs Clearance	614,932.00	900,123.00	-	66,163	-	-	1,448,892.00
8017	P23389 - T2A VP - GB Bussing Decant	178,120.00	1,023,904.00	13,756.00	-	17.00	-	1,188,251.00
7207	EAD Mid Stands & Taxiways	115,693.00	175,693.00	-	-	-	-	60,000.00
9518	T4 Baggage Works for Step 9	-	3,298,354.00	40,936,311.00	8,470,086	146,804.00	-	52,851,555.00
6222	T3 CSA	-	8,040,913.00	4,712,617.00	929,436	2,964.00	-	13,680,002.00
6391	T1 Re-flooring	1,588,750.00	40,592.00	-	-	-	-	1,548,158.00
6089	Fit-out Windsor VIP Suite	79,000.00	-	-	-	-	-	79,000.00
9022	Automation Prove Out	1,804,338.00	922,651.00	25,365.00	-	-	-	2,701,624.00
6640	T1 Remote Coaching	2,897,515.00	29,457.00	-	-	5,531.00	-	2,862,527.00
9338	T5A/B Baggage System Improvement	-	38,178.00	193,018.00	-	-	-	231,196.00
6939	T2A VP - WBCI HAL Occup	14,000.00	-	-	-	-	-	14,000.00
9104	BMI CIP Lounge Fit Out (cont)	200,000.00	1,050,000.00	-	-	-	-	1,250,000.00
3703	Plantroom Access Control	-	2,110.00	-	-	-	-	2,110.00
6134	T5 Live IT systems	661,246.00	275.00	-	-	-	-	660,971.00
7701	T3 PR10 AHU Replace Ph2	1,296,059.00	46,855.00	4,350.00	-	-	-	1,338,564.00
9640	T4 Baggage Reclaim Hall Refurb	-	-	99,348.00	-	99,348	-	-
9128	T1 Zone R Security Standardisation	818,657.00	3,221,343.00	37,813.00	-	-	-	4,002,187.00
3401	T3 Remote JX Stands (A380)	67,602.00	-	17,978.00	-	-	-	85,580.00
9269	T3 Transformation Scope Gap 09	-	3,225,305.00	123,806.00	339,695	29,287.00	7,500.00	3,419,407.00
3710	Terminal Forecourt Security	-	-	-	42,856	-	-	42,856.00
8434	T2A VP - Rent & Staff Costs	1,670,923.00	1,610,380.00	36,668.00	15,773	667.00	-	3,281,303.00
4347	T3 AHU replacement	4,689.00	-	-	-	-	-	4,689.00
6138	Third Party Start Up	197,151.00	-	-	-	-	-	197,151.00
9519	Biog 139 BA Fleet Change Act/1 Can Make Up Stillage	-	20,902.00	2,127.00	11,684	-	19,350.00	54,063.00
6546	T3 Fire Alarm Delay	33,353.00	10,704.00	-	-	-	-	22,649.00
5695	M4 Junction 4 Works	-	-	-	1,303,474	-	-	1,303,474.00
9520	T5 A&B Dock Weathering	-	57,518.00	120,373.00	68,504	3,666.00	-	250,061.00
6541	MSCP West Phase 2	11,962.00	-	-	-	-	-	11,962.00
8901	CPS	751,103.00	5,793,878.00	36,668.00	15,773	667.00	-	6,588,025.00
8542	HET VP - T2A Spec Sys Decant	309,317.00	792,562.00	39,712.00	-	-	-	1,141,592.00
6141	T5 Operational Equipment	414,154.00	-	-	80,151	-	-	494,305.00
9181	T1 Additional Works	62,000.00	5,019,796.00	5,262,808.00	7,679	-	-	10,336,925.00
9527	T5 DCV Bypass	-	-	685,375.00	12,663	-	-	698,038.00
7799	People with reduced mobility	475,875.00	40,687.00	-	-	-	-	435,188.00

Q5 Capital Investment Programme as at SCBP 2013

BCT	Project Name	08/09	09/10	10/11	11/12	12/13	13/14	TOTAL
6547	T3 Services Subway Refurb	26,490.00	-	811.00	-	-	-	25,679.00
6296	T2 HAL CAB	-	2,212,025.00	15,628.00	-	-	-	2,227,653.00
7443	T3 Flooring 07/08	107,908.00	-	-	-	-	-	107,908.00
9109	Fixed POST Reduction	19,810.00	1,625,323.00	2,960.00	959	-	-	1,649,052.00
6143	LUL Network Costs	3,115,953.00	-	-	-	-	-	3,115,953.00
6144	T5 Live Logistics	237,086.00	-	-	-	-	-	237,086.00
2178	HEX intervention pt relocation	16,086.00	1.00	-	-	-	-	16,087.00
9940	T4 Guf Air CIP Lounge	-	-	521,378.00	-	-	-	521,378.00
8265	Leas & Montage T5	23,031.00	294.00	-	-	-	-	23,325.00
8376	Northern Perimeter Congestion	615,000.00	-	17,937.00	-	-	-	597,063.00
6145	T5 Live Facility Maintenance	155,451.00	-	-	-	-	-	155,451.00
9944	T4 Off Pier Coaching	-	-	966,784.00	37,524	-	-	929,260.00
9303	Wellington Road Security Search	-	88,897.00	745,526.00	11,067	56,515.00	-	902,005.00
8541	T3 Escalator replacement	191,451.00	655,189.00	7,483.00	-	-	-	839,157.00
6519	T5 Lan Integration Work	970.00	-	-	-	-	-	970.00
9379	T3 VAT Reclaim Desk	-	39,316.00	218,667.00	947,209	22,820.00	-	1,228,012.00
6561	T5 Automated Public Address	35,031.00	-	-	-	-	-	35,031.00
4995	Concrete Batcher Infra	-	88,483.00	-	-	-	-	88,483.00
9801	Zone A Desk Capacity	-	-	79,060.00	77	-	-	79,137.00
9951	T4 Interim VIP suite	-	-	381,432.00	414,610	-	-	796,042.00
9121	T3 Arrivals IR cladding	16,357.00	-	16,357.00	-	-	-	16,357.00
8136	T3 Connections Branding	174,190.00	5,760.00	-	-	-	-	168,430.00
6858	T5 Arteries	191.00	-	-	-	-	-	191.00
6889	Roads Wayfinding	-	-	271,743.00	-	-	-	271,743.00
4306	SIS Replacement project	79,837.00	-	2,700.00	-	-	-	77,137.00
8106	LPI1 - Invision	70,000.00	7,325,519.00	1,497,286.00	155,522	-	-	8,727,283.00
4583	Sub Fire Stn Relocation Ph 2	838,084.00	-	5,116.00	-	-	-	832,968.00
9107	LPI2 - Kern	85,000.00	10,445,861.00	348,217.00	-	-	-	10,879,078.00
4761	Runway radar FOD detector	3,096,570.00	21,980.00	-	9,512	-	-	3,109,038.00
9108	LPI3 - ROCK	118,000.00	8,519,795.00	1,029,609.00	8,411	-	-	9,658,993.00
6892	Arside T5 Irregation	58,722.00	-	-	108,971	1,030.00	-	166,663.00
6296	ACL substation enhancements	125,390.00	11,011.00	11,416.00	-	10,000.00	-	114,985.00
6893	Arside Stand Allocation	184,386.00	-	-	-	35,815.00	-	220,201.00
9778	Retail 2010 (CWP) Concessions	-	-	818,451.00	219,294	-	-	1,037,745.00
6852	T4 - T5 Cargo Road	97,630.00	-	3,443.00	-	-	-	94,187.00
9785	Retail 2010 (CWP) Services	-	-	403,000.00	1	-	-	402,999.00
6547	T4 A380 stands	2,633,650.00	778,718.00	44,902.00	175,000	-	-	3,192,466.00
6884	IDAHQ Check In	4,126.00	-	-	-	-	-	4,126.00
7039	Guard Trac for T5	5,484.00	-	-	-	-	-	5,484.00
3050	TTT - Northern Taxways	395.00	-	-	-	-	-	395.00
7044	Loose Op Equip facilities Mgr	118,185.00	14,407.00	-	-	-	-	132,592.00
221	A380 Southern CTA Taxways	389,975.00	416.00	-	-	-	-	390,391.00
674	New ACL Control System	-	2,523.00	-	-	-	-	2,523.00
8810	Link 35	2,310.00	-	-	-	-	-	2,310.00
7250	T5 Firestorm	50,000.00	-	-	-	-	-	50,000.00
8902	T1 Airfield Remediation Pier 3	-	-	6,236.00	471	-	-	6,707.00
7296	Cargo RZ re CP20	400.00	-	-	-	-	-	400.00
7298	T5 Cellular	1,233,109.00	616,554.00	-	-	-	-	1,849,663.00
7262	T5 Information Zone	438,750.00	-	-	-	-	-	438,750.00
7366	Bus & coach Display	33,378.00	-	-	-	-	-	33,378.00
7367	Onward Travel	123,528.00	-	-	-	-	-	123,528.00
7368	Retail Marketing Sites	4,519.00	-	-	-	-	-	4,519.00
7407	FF&E Art Work Allowance	300,000.00	-	-	-	-	-	300,000.00
7410	T5 Energy Centre Maintenance	107,879.00	-	-	-	-	-	107,879.00
7543	T5 Cleaning Start Up	28,335.00	-	-	-	-	-	28,335.00
7758	Enhancement to LTHW system	3,923.00	-	-	6,124	-	-	3,923.00
7911	Wellington Road Start-up costs	150,042.00	-	-	-	-	-	150,042.00
7912	Temp staff training facility	-	-	-	-	-	-	-
8133	Directly charges staff costs	2,325,202.00	7,070.00	-	-	-	-	2,318,132.00
8189	Locks	-	26,268.00	-	-	-	-	26,268.00
8299	OH Facility costs	2,725.00	-	-	-	-	-	2,725.00
8320	T5 Build Requests	343,663.00	-	-	6,124	-	-	337,539.00
8321	Start Search	80.00	-	-	-	-	-	80.00
8407	Contingency planning equipment	33,731.00	22,803.00	5,342.00	-	-	-	61,876.00
8603	T5 Late Business Change	6,177,977.00	-	-	-	82,749.00	-	6,095,228.00
10639	Summer 2012 - Retained Assets	-	-	-	-	8,043,040.00	-	8,043,040.00
Total prior to adjustments (P60 EAC)		693,062,076.00	680,413,489.00	708,358,064.00	881,512,177	1,127,388,014.00	1,292,989,655.00	5,383,723,475.00
Adjustments to Mgrt reserve		-	-	-	-	-	-	-
Adjustments		-	-	-	-	-	-	-
Total following adjustments (BAC: Performance Baseline)		693,062,076.00	680,413,489.00	708,358,064.00	881,512,177	1,127,388,014.00	1,292,989,655.00	5,383,723,475.00
Total		711,350,773.00	683,651,695.00	708,971,328.00	902,470,242	1,146,467,952.00	1,306,889,022.00	5,459,801,012.00

Appendix K: Tracker

All Costs in 0708 Comparative Prices

Heathrow Airport Limited CIP at Settlement			SCBP 2012			SCBP 2013			Significant scope changes SCBP 2013 compared with Q5 Settlement (See Footnote) (NB cost refs are to outturn price)					
CIP ID	BCT no.	Project Name (as at Q5 Settlement)	TOTAL	BCT no.	Project Name (as at SCBP 2012) Delivery Programme at SCBP 2012	TOTAL	BCT no.	Project Name (as at SCBP 2013) Delivery Programme at SCBP 2013		TOTAL	Comparison SCBP 2013 v SCBP 2012	Comparison SCBP 2013 v Settlement		
HEATHROW TOTAL			4542				4420				5495	1075	953	
		BAA IT	112				127				202	75	90	Z22m transferred from Development for IT Major Projects, Telecoms (BCT 3606) and some minor other movements in July 2009. €9m transferred to Development (management efficiency line) at BB6. Transfer of €1m from Development for intellectual works on Heathrow priority projects (work up to and including G2) and €3m for IT Data Security Programme. Incorporation of €44m for new scope included in the OS+1 (2013/14) Heathrow Capital Plan Version 26 and €11m for Maximo, Realtime Heathrow and Wi-Fi. Increase of £22m driven by inclusion of general IT purchases that were previously included in the adjustments category.
		BAA RAIL	151				75				77	1	-75	Separation and clarification of Crossrail and Airtrack spend patterns. Some movement of cost within individual projects. T4 Enhancement (Connect 4 trains per hour) project developed. Airtrack programme terminated and unused funds (£81m) transferred to Development.
		HAL Capital Projects	3615				4016				5014	998	1399	See comments shown below against each project
		Thames Water	25				38				38		13	
		HAL + TW	3640				4055				5052	998	1413	
		PSDH	640				96				94	-2	-545	Transfers to T2B Phase 2 (BCT 4201) for TTS Station Box and Tunnels Across Kilo & Lima Taxiways. Transfers to Heathrow Resilience (BCT 9501) for additional airfield infrastructure eg. to provide Rapid Exit Taxiways (RETs), Rapid Access Taxiways (RATs) and associated works and transfer to T3 Integrated Baggage (BCT 3801) to enable delivery of the revised option agreed in November 2010. Unallocated budget resulting from UK Government withdrawing support for a third runway.
		Adjustments					67				70	3	70	This line has been adjusted since SCBP 2012 to align with presentation within the Regulatory Accounts.
Airline Moves														
H.T5.25a	7714	Airline Moves CIP 2007 Budget	93	7714	Airline Moves CIP 2007 Budget	Legacy		7714	Project deleted				-93	Programme broken out into the following delivery projects: Operational Readiness (BCT 7966), T3 Office Refurbishment (BCT 7540), T3 CIP New Airline Moves (BCT 7886), T4 Airline Relocation (BCT 6604), Building 139 One World (BCT 7505), T4 Post T5 Baggage Operation (BCT 7541), Relocation of Airline IT Operations (BCT 7702) & Airline Relocations - Cat B. Fit out CIP Arrivals (BCT 7793) and T2A Airside Sec Decant (BCT 7227).
H.T5.25	6137	Airline Moves	18	6137	Airline Moves	Legacy		6137	Project deleted				-18	Programme broken out into the following delivery projects: Operational Readiness (BCT 7966), T3 Office Refurbishment (BCT 7540), T3 CIP New Airline Moves (BCT 7886), Building 139 One World (BCT 7505), T4 Post T5 Baggage Operation (BCT 7541), Relocation of Airline IT Operations (BCT 7702) & Airline Relocations - Cat B. Fit out CIP Arrivals (BCT 7793) and T2A Airside Sec Decant (BCT 7227).
				7966	Operational Readiness	Legacy	6	7966	Operational Readiness	Legacy	6		6	Specific project derived from Airline Moves (BCT 6137) and Airline Moves CIP 2007 Budget (BCT 7714)
				7540	T3 Office Refurbishment Airline Moves (No CIP 2007 Provision)	Terminal Restoration & Modernisation	7	7540	T3 Office Refurbishment Airline Moves (No CIP 2007 Provision)	Terminal Restoration & Modernisation	7	0	7	Specific project derived from Airline Moves (BCT 6137) and Airline Moves CIP 2007 Budget (BCT 7714)
				7886	T3 CIP New Airline Moves (No CIP 2007 Provision)	Legacy	8	7886	T3 CIP New Airline Moves (No CIP 2007 Provision)	Legacy	8	0	8	Specific project derived from Airline Moves (BCT 6137) and Airline Moves CIP 2007 Budget (BCT 7714)

Heathrow Airport Limited CIP at Settlement				SCBP 2012			SCBP 2013				Significant scope changes SCBP 2013 compared with Q5 Settlement (See Footnote) <small>(NB cost refs are to outturn price)</small>			
CIP ID	BCT no.	Project Name (as at Q5 Settlement)	TOTAL	BCT no.	Project Name (as at SCBP 2012)	Delivery Programme at SCBP 2012	TOTAL	BCT no.	Project Name (as at SCBP 2013)	Delivery Programme at SCBP 2013		TOTAL	Comparison SCBP 2013 v SCBP 2012	Comparison SCBP 2013 v Settlement
	6604	T4 Airline Relocation		6604	T4 Airline Relocation	Legacy	12	6604	T4 Airline Relocation	Legacy	12		12	Project originally derived from Airline Moves CIP provision (BCT 7714); CIP Lounge scope subsequently transferred from this BCT line to BCT 2303.
				7505	Building 139 One World	Legacy	8	7505	Building 139 One World	Legacy	8	0	8	Specific project derived from Airline Moves (BCT 6137) and Airline Moves CIP 2007 Budget (BCT 7714)
				7541	T4 Post T5 Baggage Operation	Legacy	4	7541	T4 Post T5 Baggage Operation	Legacy	4		4	Specific project derived from Airline Moves (BCT 6137) and Airline Moves CIP 2007 Budget (BCT 7714)
				8020	Tug Charging & Stillage	Legacy	1	8020	Tug Charging & Stillage	Legacy	1		1	
				7702	Relocation of Airlines IT Operations	Legacy	12	7702	Relocation of Airlines IT Operations	Legacy	12	0	12	Specific project derived from Airline Moves (BCT 6137) and Airline Moves CIP 2007 Budget (BCT 7714)
				7793	Airline Relocations - Cat B fit out - CIP (Arrivals)	Legacy	3	7793	Airline Relocations - Cat B fit out - CIP (Arrivals)	Legacy	3		3	Specific project derived from Airline Moves (BCT 6137) and Airline Moves CIP 2007 Budget (BCT 7714)
Interim Terminal 1														
				4630	T1 Star Parent Project	Legacy	-7	4630	T1 Star Parent Project	Legacy	-7	0	-7	Scope transferred to the following T2 projects: T1 FCC & Immigration (BCT 3822), T1 Arrivals & Departures Refurbishment (BCT 4075), T1 HBS & Transfer Baggage System (BCT 3823), T1 Displacements (BCT 6944), Pier 3 Demolition (BCT 6716), T1 P4A Wst Demo & 4 rem JS Stn (BCT 4243), T2A VP - BMI Relocation (BCT 6917), T1 Pier 4 Segregation (BCT 3884), T1 Pier 3 Segregation (BCT 6645), T1 Europier US/TSAs Requirements (BCT 6635), T2B Phase 1 (BCT 4539), T2B South (BCT 4199), T2B Phase 2 (BCT 4201), North East Taxiways (BCT 3212), South East Taxiways (BCT 3817), Relocation of 10cm Radar (BCT 6495), T1 P4A Wst Demo & 4 rem JS Stn (BCT 4243), Reconfiguration of stand 240/242 (BCT 4119), T2B NW Stands & Taxiways (BCT 7205), T2B NE Stands & Taxiways (BCT 7206), Relocation of Substation 56 (BCT 7212), Eastern Campus Airfield Taxiways and Road (BCT 4202),
H.T1.47	6944	T1 Displacements	6	6944	T1 Displacements	Legacy	11	6944	T1 Displacements	Legacy	11		5	Redistribution of costs from T1 Parent Project (BCT 4630), Cat B office fit-out scope added and impact of Switch 2 delay including Move Sequence 2.1. Additional scope transferred from Pier 4A West Demo project (BCT 4243) and T1 Pier 4 Segregation (BCT 3884). CIP lounge fit out scope transferred to BMI CIP Lounge Fit Out (BCT 9104).
H.T1.18	3823	T1 HBS & Transfer Baggage System	10	3823	T1 HBS & Transfer Baggage System	Legacy	11	3823	T1 HBS & Transfer Baggage System	Legacy	11	0	1	Redistribution of Explore & Options costs from T1 Parent Project (BCT 4630). Transfer from HBS Replacement Project (BCT 615) for MVT-HR machines.
H.T1.17	3822	T1 FCC & Immigration	4	3822	T1 FCC & Immigration	Legacy	7	3822	T1 FCC & Immigration	Legacy	7	0	2	Redistribution of costs from T1 Parent Project (BCT 4630). Increase relating to Q5 budget setting exercise and movement from Q4 to Q5.
H.T1.29	4075	T1 Arrivals & Departures Refurbishment	32	4075	T1 Arrivals & Departures Refurbishment	Legacy	32	4075	T1 Arrivals & Departures Refurbishment	Legacy	32		0	Redistribution of costs from T1 Parent Project (BCT 4630). Arrivals forecourt scope transferred to T1 Arrivals Forecourt (BCT 8216). Scope transferred to T1 Zone R Security Standardisation (BCT 9128). Scope transferred from Pier 4A West Demo (BCT 4243).
				8216	T1 Arrivals Forecourt	Legacy	1	8216	T1 Arrivals Forecourt	Legacy	1		1	Created from T1 Arrivals & Departures project (BCT 4075). Additional scope for Cranwell Rd re-design.
				9104	BMI CIP Lounge Fit Out (cont)	Legacy	1	9104	BMI CIP Lounge Fit Out (cont)	Legacy	1		1	Transfer from T1 Displacements project (BCT 6944).
				9128	T1 Zone R Security Standardisation	Legacy	4	9128	T1 Zone R Security Standardisation	Legacy	4		4	Transfer of scope and budget from T1 Arrivals and Departures Refurbishment project (BCT 4075) for security standardisation requirements. Transfer from Control Tower Site Purchase (BCT 8450), T1 Site Welfare etc (BCT 7164) and IBR6 Realignment.

Heathrow Airport Limited CIP at Settlement				SCBP 2012			SCBP 2013					Significant scope changes SCBP 2013 compared with Q5 Settlement (See Footnote) <small>(NB cost refs are to outturn price)</small>		
CIP ID	BCT No.	Project Name (as at Q5 Settlement)	TOTAL	BCT No.	Project Name (as at SCBP 2012)	Delivery Programme at SCBP 2012	TOTAL	BCT No.	Project Name (as at SCBP 2013)	Delivery Programme at SCBP 2013	TOTAL		Comparison SCBP 2013 v SCBP 2012	Comparison SCBP 2013 v Settlement
				9181	T1 Additional Works	Legacy	10	9181	T1 Additional Works	Legacy	10		10	New portfolio of projects established at IBR4 to deliver additional scope of works required in T1 prior to T2A opening. Savings in Zone K, Gate 5 & Environs and Gate 2 Domestic work packages, also minor scope transfers to other projects and scope received from T1 Pier 4 Segregation (BCT 3884). Incorporation of new scope included in the Q5+1 (2013/14) Heathrow Capital Plan Version 26 for Core Electrical Distribution Upgrades. Reduction in risk allowance.
								10806	Core Electrical Distribution Upgrades	Portfolio of Projects	6	6	6	
Eastern Piers & Aprons														
H.T1.26	3884	T1 Pier 4 Segregation	1	3884	T1 Pier 4 Segregation	Legacy	2	3884	T1 Pier 4 Segregation	Legacy	2		1	Increased scope and revised schedule following CIP 2008. Explore & Options costs redistributed from T1 Parent Project (BCT 4630). Minor transfers to T1 Displacements (BCT 6944), T1 Re-flooring (BCT 6391) and T1 Additional Works (BCT 9181).
H.T1.26a	7612	T1 Pier 4A Segregation	2	7612	T1 Pier 4A Segregation	Legacy	2	7612	T1 Pier 4A Segregation	Legacy	2		0	
H.T3.40	6645	T1 Pier 3 Segregation	1	6645	T1 Pier 3 Segregation	Legacy	0	6645	T1 Pier 3 Segregation	Legacy	0		0	Scope transferred to T1 Re-flooring (BCT 6391).
H.T1.49	6646	T1 Remote Coaching	3	6646	T1 Remote Coaching	Legacy	3	6646	T1 Remote Coaching	Legacy	3	0	-1	
H.T1.48	6495	Relocation of 10cm Radar	1	6495	Relocation of 10cm Radar	Legacy	1	6495	Relocation of 10cm Radar	Legacy	1		0	Redistribution of Explore & Options costs from T1 Parent Project (BCT 4630).
H.A55.12	3212	North East Taxiways	2	3212	North East Taxiways	Legacy	0	3212	North East Taxiways	Legacy	0		-2	Scope transfer to T2B North East Stands & Taxiways (BCT 7206). Scope transfer to EAD Mid Stands & Taxiways (BCT 7207). Redistribution of Explore & Options costs from T1 Parent Project (BCT 4630).
H.A55.55	7207	EAD Mid Stands & Taxiway	13	7207	EAD Mid Stands & Taxiways	Legacy	0	7207	EAD Mid Stands & Taxiways	Legacy	0		-13	Scope transfer from NE Taxiways (BCT 3212). Project merged with T2B SE Stands & Taxiway (BCT 7209).
H.T1.07b	7205	MFP NW Stands & Taxiways	30	7205	T2B NW Stands & Taxiways	Portfolio of Projects	34	7205	T2B NW Stands & Taxiways	Portfolio of Projects	34		4	Redistribution of Explore & Options costs from T1 Parent Project (BCT 4630). Transfer of scope to T2B NE Stands & Taxiways (BCT 7206). Transfer of scope for Sub station 260 from Eastern Campus Airfield Taxiways and Road (BCT 4202).
H.T1.07c	7206	MFP NE Stands & Taxiways	11	7206	T2B NE Stands & Taxiways	Legacy	14	7206	T2B NE Stands & Taxiways	Legacy	14		3	Redistribution of Explore & Options costs from T1 Parent Project (BCT 4630), transfer of scope from T2B NW Stands & Taxiways (BCT 7205) & North East Taxiways (BCT 3212). Transfer of foul pumping station to T2B Phase 1 (BCT 4539).
H.A55.35	3817	South East Taxiways	63	3817	South East Taxiways	Legacy	53	3817	South East Taxiways	Legacy	53	0	-11	BT scope transferred to Eastern Campus Airfield Taxiways and Road (BCT 4202). Redistribution of Explore & Options costs from T1 Parent Project (BCT 4630). Further reductions due to final account negotiations.
H.A55.50	4202	EA A/side Rd & Taxiway U/pass	58	4202	Eastern Campus Airfield Taxiways and Road	Portfolio of Projects	47	4202	Eastern Campus Airfield Taxiways and Road	Portfolio of Projects	46	-1	-12	Project reprogrammed after CIP 2008 & scope transfer to T2A Building & Stands (BCT 8802) via BCT 7766. Concourse for relocation of the Southern Grade Separated road. Redistribution of Explore & Options costs from T1 Parent Project (BCT 4630). Service Diversion/Enabling works were deferred to support programme. Scope transfers from A380 Taxiways Around Pier 1 (BCT 2809), South East Taxiways (BCT 3817) and Eastern Campus EIS (BCT 8828). Realigned in accordance with IBR6. Transfer of scope for Sub station 260 to T2B NW Stands (BCT 7205). Reductions due to final account negotiations.

Heathrow Airport Limited CIP at Settlement				SCBP 2012			SCBP 2013							
CIP ID	BCT no.	Project Name (as at Q5 Settlement)	TOTAL	BCT no.	Project Name (as at SCBP 2012)	Delivery Programme at SCBP 2012	TOTAL	BCT no.	Project Name (as at SCBP 2013)	Delivery Programme at SCBP 2013	TOTAL	Comparison SCBP 2013 v SCBP 2012	Comparison SCBP 2013 v Settlement	Significant scope changes SCBP 2013 compared with Q5 Settlement (See Footnote) (NB: cost refs are to outturn price)
H.T1.36a	7209	MFP SE Stands & Taxilane	46	7209	T2B Apron	Terminal 2	30	7209	T2B Apron	Terminal 2	55	25	9	T2B SW Stands & Taxilanes (BCT 7210) and EAD Mid Stands & Taxilanes (BCT 7207) merged with this project. Realignment in accordance with IBR6. Scope for airside work to Eastern Campus Ancillary buildings transferred from Eastern Campus Accommodation (BCT 9723). Transfer of scope to divert, or decommission, known underground services prior to the construction of the T2B Phase 2 Stands. Reduction in EAC at Construction Decision and realignment in accordance with IBR8. Inclusion of Q5+1 EAC (See footnote). Increase to reflect the reported gateway figure at Targets Confirmation. Transfer of scope to T2 Logistics (BCT 8798) associated with the Integrated Logistics provision and transfer of Airside Vehicle Wash (BCT 10736) and Airside Fuelling Facilities (BCT 10737) to the Portfolio of Projects Programme.
H.T1.36b	7210	MFP SW Stands & Taxilanes	24	7210	T2B SW Stands & Taxilanes	Legacy	0	7210	T2B SW Stands & Taxilanes	Legacy	0		-24	Entire scope transferred to T2B Apron (BCT 7209)
H.T1.50a	7718	Eastern Maint Base Redev	33	7718	Eastern Maint Base Redev	Portfolio of Projects	7	7718	Eastern Maint Base Redev	Portfolio of Projects	6	-1	-27	Revised programme for the delivery of this project. Design works only to be carried out in Q5. Inclusion of Q5+1 EAC (See footnote). Project rescheduled and scope moved to Q6.
H.T1.06d	6716	Pier 3 Demolition	2	6716	Pier 3 Demolition	Legacy	0	6716	Pier 3 Demolition	Legacy	0		-2	Redistribution of Explore & Options costs from T1 Parent Project (BCT 4630). Scope transferred to T2B Phase 2 (BCT 4201) for delivery.
H.ASS.54	7211	HET Ph2 Stands	5	7211	T2A Ph2 Stands	Legacy		7211	Project deleted				-5	Project deferred to future years.
	7212	Relocation of Substation 56	2	7212	Relocation of Substation 56	Legacy	3	7212	Relocation of Substation 56	Legacy	3		1	Scope transferred from Eastern Apron Outer Pier North (BCT 7717). Redistribution of Explore & Options costs from T1 Parent Project (BCT 4630)
	6793	Wks to Feltham Balancing Pond	3	6793	Heathrow Storm Water Catchment	Portfolio of Projects	12	6793	Heathrow Storm Water Catchment	Portfolio of Projects	16	4	14	Scope increased at IBR6 to include airfield Storm-Water Catchment requirements. Scope reviewed in February 2012 and some items no longer required. Transfer of scope from Q6 Pollution Control Systems (BCT 10798) for Glycol Works.
				4119	Reconfiguration of stand 240/242	Legacy	1	4119	Reconfiguration of stand 240/242	Legacy	1		1	Redistribution of Explore & Options costs from T1 Parent Project (BCT 4630)
				7164	T1 Site Welfare & Site Office facilities	Legacy	2	7164	T1 Site Welfare & Site Office facilities	Legacy	2		2	Minor transfers in from other projects including deliver of works required at CP 5 (BCT 8801). Scope transferred to T1 Zone R Security Standardisation (BCT 9218). Project extended into Q5 to align with changes to T1 programme.
H.T1.06c	4527	T1 Terminal Pier	6	4527	T1 Terminal Pier	Legacy		4527	Project deleted				-6	Schedule revised and early stages of project are no longer in Q5, subject to future CIP negotiation.
				9351	T1 Baggage Prolongation Programme	Terminal 2	80	9351	T1 Baggage Prolongation Programme	Terminal 2	65	-15	65	New requirement captured at IBR6 for works to T1 baggage system to prolong its life until introduction of T2A baggage system. Consolidation of projects to improve delivery with scope transferred from HBS Replacement (BCT 9355) & T2A Baggage (BCT 9853). Transfers in of the Production Design of the T4 SAC solution, manufacture and assembly of the T4 SAC solution and all T1 Gemini II scope for delivery in time for the Olympics. Further reviews of scope, supplier estimates and EAC. Inclusion of Q5+1 EAC (See footnote). Transfer of scope associated with the T2A Baggage Applications to T1 Transitions (BCT 10309)

All Costs in 07/08 Comparative Prices

Heathrow Airport Limited CIP at Settlement				SCBP 2012			SCBP 2013							
CIP ID	BCT No.	Project Name (as at Q5 Settlement)	TOTAL	BCT No.	Project Name (as at SCBP 2012)	Delivery Programme at SCBP 2012	TOTAL	BCT No.	Project Name (as at SCBP 2013)	Delivery Programme at SCBP 2013	TOTAL	Comparison SCBP 2013 v SCBP 2012	Comparison SCBP 2013 v Settlement	Significant scope changes SCBP 2013 compared with Q5 Settlement (See Footnote) <small>(NB cost refs are to outturn price)</small>
HET (T2A)														
H.ET.01	6100	HET Phase 1	1080	6100	T2A Early Stage Cost	Legacy	0	6100	T2A Early Stage Cost	Legacy	0		-1080	Scope transferred to the following T2A projects for delivery: P23225 - T2A Scheme Design Stage (BCT 7767), T2A Building and Stands (BCT 8802), T2A ICS (BCT 8804), T2A Baggage (BCT 8805), Eastern Campus EIS (BCT 8828), T2 Logistics (BCT 8798), P23224 - T2A L/S Early Services Relocation (BCT 7769), P23222 - T2A A/S Early Services Relocation (BCT 7779), QB & T2 Demolition (BCT 8799), T2 Demolition (BCT 8800), CP5 (BCT 8801), Other CTA Enabling Works (BCT 8803), T2 Leadership (BCT 8794), T2A Phase 1 Stands (BCT 8807).
				7769	P23224 - T2A L/S Early Services Relocation	Legacy	19	7769	P23224 - T2A L/S Early Services Relocation	Legacy	19		19	Specific project derived from T2A Early Stage Cost (BCT 6100)
				7767	P23225 - T2A Scheme Design Stage	Legacy	18	7767	P23225 - T2A Scheme Design Stage	Legacy	18		18	Specific project derived from T2A Early Stage Cost (BCT 6100)
				8802	T2A Building and Stands	Terminal 2	808	8802	T2A Building and Stands	Terminal 2	1066	258	1066	Specific project derived from BCT 6100. Subsequent transfer of Baggage scope (to and from T2A Baggage, BCT 9853) with net result that T1 Baggage transition scope will be delivered via a new project (BCT 10309), remaining T2A baggage scope is in this project. ICS scope transferred to new project (BCT 9805) and amalgamated with ICS scope from T2B Phase 2 to improve delivery. Construction works transferred from T2A Phase 1 Stands (BCT 8807). Transfer of capital charges and insurances from T2 Leadership (BCT 8794) and jetty scope from Additional Jetty Provision (BCT 7656). EIS scope received from separate project (BCT 8828). Reductions following ICS Construction Decision and procurement savings on substructure and frame. Scope increase resulting from adoption of Programme D, including change to air displacement unit height and frequency of DVT's, relocation of bridges & VCS to western facade, addition of 8th baggage reclaim belt, additional escalator requirements, completion of wayfinding design; revision to schedule dates. Scope increase due to MOU+ Growth due to additional CO flights being moved to T2 and some short haul flights changed to long haul. Rebased at 1888 in line with the revised HETCO integrated schedule. Inclusion of OS+1 EAC (See footnote). Priority 1 & 2 Programme Change Items added in 2012/13.
				8804	T2A ICS	Legacy		8804	T2A ICS	Legacy				Specific project derived from T2A Early Stage Cost (BCT 6100).
				8805	T2A Baggage	Legacy	0	8805	T2A Baggage	Legacy	0		0	Specific project derived from T2A Early Stage Cost (BCT 6100).
				8799	QB & T2 Demolition	Legacy	25	8799	QB & T2 Demolition	Legacy	25		25	Specific project derived from T2A Early Stage Cost (BCT 6100). T2 Demolition (BCT 8800) merged with this project. Subsequent transfer of demolition of ground floor slab to T2A Building & Stands (BCT 8802). Transfer of capital charges and insurances from T2 Leadership (BCT 8794). Transfer of decommissioning and strip out of tenants fit out areas from T2A Prop decant risk/opp (BCT 7231).
				8807	T2A Phase 1 Stands	Legacy	1	8807	T2A Phase 1 Stands	Legacy	1		1	Specific project derived from T2A Early Stage Cost (BCT 6100). Construction works transferred to T2A Building & Stands (BCT 8802)
				8828	Eastern Campus EIS	Legacy	4	8828	Eastern Campus EIS	Legacy	4	0	4	Specific project originally derived from T2A Early Stage Cost (BCT 6100). Scope transferred to Eastern Campus Airfield Taxiways and Road (BCT 4202) and delivery of Eastern Campus Energy Centre to Energy Infrastructure (BCT 7666). Further minor scope transfers to other projects including T2A Building & Stands (BCT 8802).

Heathrow Airport Limited CIP at Settlement				SCBP 2012			SCBP 2013							
CIP ID	BCT no.	Project Name (as at Q5 Settlement)	TOTAL	BCT no.	Project Name (as at SCBP 2012)	Delivery Programme at SCBP 2012	TOTAL	BCT no.	Project Name (as at SCBP 2013)	Delivery Programme at SCBP 2013	TOTAL	Comparison SCBP 2013 v SCBP 2012	Comparison SCBP 2013 v Settlement	Significant scope changes SCBP 2013 compared with Q5 Settlement (See Footnote) (NB cost refs are to outturn price)
				8794	T2 Leadership	Terminal 2	58	8794	T2 Leadership	Terminal 2	88	30	88	<p>Specific project derived from BCT 6100 for programme and project management including capital charges, insurance and managed service provider costs relating to all Terminal 2 projects. Revisions to supplier schedule resulting in movement from Q5 to future years; transfer of capital charges & insurances to other T2 projects (BCT's 8799, 8802 & 8798); transfer of business risk from T2A Building & Stands (BCT 8802). Further increase relating to schedule mitigation, transfers of management service providers fees from T2B Phase 2 (BCT 4201), T2 ICS (BCT 9805), MSCP 2 (BCT 3814), T2 Logistics (BCT 8798) and Control Tower Demolition (BCT 8888). Realignment in accordance with IBR8.</p> <p>Inclusion of Q5+1 EAC (See footnote). Transfer of scope from T2A Building (BCT 8802) associated with the rent and rates for Voyager House, T2 Commercial scope associated with Retail Delivery, Luxury scope & Telco scope to a new T2 Commercial project (BCT 10832) to allow team to manage scope. Scope transfer from T2A Building (BCT 8802) associated with the operational requirements, T2A construction completion event, Opening of T2A Event and the running costs for the Cooling Station & Energy Centre included elsewhere.</p>
				8798	T2 Logistics	Terminal 2	50	8798	T2 Logistics	Terminal 2	84	33	84	<p>Specific project derived from T2A Early Stage Cost (BCT 6100) for the provision of central logistic costs including site accommodation, use of CLC, control post costs, canteen facilities etc. relating to all Terminal 2 projects. Revisions to supplier schedule resulting in minor movement from Q5 to future years. Transfer of Capital Charges, insurances and utilities charges from T2 Leadership (BCT 8794). Reassessment of risks. Scope transfer for logistics services required from T2B Phase 1 (BCT 4539), T2B Phase 2 (BCT 4201) and MSCP 2 (BCT 3814). Realignment in accordance with IBR8. Transfer of management services providers fees to T2 Leadership (BCT 8798).</p> <p>Inclusion of Q5+1 EAC (See footnote). Transfers of scope associated with the integrated Logistics provision from T2B Apron (BCT 7209) and Baggage Logistics from T2 Phase 1 Baggage (BCT 10309). Increase associated with the 3rd Party Fit Out Logistics from Sectional Completion to T2 Opening as agreed at IBR8.</p>
				9723	T2 Ancillary Accommodation	Terminal 2	15	9723	T2 Ancillary Accommodation	Terminal 2	14	-1	14	<p>Specific project derived from T2A Early Stage Cost (BCT 6100) for the provision of accommodation block for ramp and baggage operations when T2A becomes operational including facilities for equipment parking, stillage, aircraft waste and de-icing. Airside scope of T2 ancillary buildings transferred to T2B Apron (BCT 7209). Transfer of managed service provider's fees to T2 Leadership (BCT 8794). Adjustments in line with estimated cost reviews. Scope transfer of early services works to be delivered by HETCo to T2A Building & Stands (BCT 8802). Transfer of scope to T2A Building and Stands (BCT 8802) associated with the design & construction of the permanent termination pit for the LTHW pipework and ICS scope to T2 ICS (BCT 9805).</p>

Heathrow Airport Limited CIP at Settlement			SCBP 2012			SCBP 2013				Significant scope changes SCBP 2013 compared with Q5 Settlement (See Footnote) (NB cost refs are to outturn price)				
CIP ID	BCT no.	Project Name (as at Q5 Settlement)	TOTAL	BCT no.	Project Name (as at SCBP 2012)	Delivery Programme at SCBP 2012	TOTAL	BCT no.	Project Name (as at SCBP 2013)		Delivery Programme at SCBP 2013	TOTAL	Comparison SCBP 2013 v SCBP 2012	Comparison SCBP 2013 v Settlement
				8888	Control Tower Demolition	Terminal 2	4	8888	Control Tower Demolition	Terminal 2	4	0	4	Specific project derived from BCT 6100. Scope transfer for the demolition of the OCT main building to T2A Phase 2 (BCT 7720). Scope Transfer of the ICS scope contained within the Stage 2 of the OCT Demo eg BT Infrastructure, IT Infrastructure and Pit & Ducts to T2 ICS (BCT 9805). Reduction in line with output from the estimated cost reviews. Estimated cost reduction associated with unlet work no longer required and not converted from planning package to work package.
H.R.05	3814	New Build MSCP - East	50	3814	MSCP 2	Terminal 2	92	3814	MSCP 2	Terminal 2	147	55	97	Scope added from Landside CTA Development (BCT 4369) for roads work and from T2A Building (BCT 8802) for forecourt works. Procurement savings through OJEU process, transfer of secant piling and basement structure for LUL connector tunnel to T2A Building (BCT 8802), scope transfer to T2 ICS (BCT 9805). Scope transfer from T2A Phase 2 (BCT 7720) for scheme design and early enabling works. Scope transfer of the Integrated Logistics services provision to T2 Logistics (BCT 8798). Scope transfer of management service providers fees to T2 Leadership (BCT 8794). Inclusion of Q5+1 EAC (See footnote). Scope Transfers of MSCP Phase 1A remaining Enabling Works & Main Build Scope from MSCP Phase 2 Full Rebuild (BCT 10801) in Programme Identification. Increases associated with IB88 Cost Pressures and CTA Tunnels Improvements work.
H.R.05a	8450	Control Tower Site Purchase for MSCP East	42	8450	Control Tower Site Purchase for MSCP East	Legacy	44	8450	Control Tower Site Purchase for MSCP East	Legacy	44		2	Scope transfer to T1 Zone R Security Standardisation (BCT 9128) and adjustments following IB84.
H.ET.01a	7720	HET Phase 2/ T2A Phase 2	50	7720	T2A Phase 2	Programme Identification	9	7720	T2A Phase 2	Programme Identification	9	-1	-41	Part deferral of scope to future years. Scope Transfer of the demolition of the OCT main building from Control Tower Demolition (BCT 8888). Scope Transfer to T2B Phase 2 (BCT 4201) for the ITS Shield Study works. Transfer of surplus T2 Phase 2 Q5 design funding for Q5+1 Q6 work to BCT 10472. Transfer of T2 MSCP Scheme design and enabling works to MSCP 2 (BCT 3814). Scope transfer of the EI AI relocation project to T2B Phase 2 (BCT 4201)
								10789	T2 Pier 6 Connector	Programme Identification	3	3	3	Incorporation of new Programme Identification scope included in the Q5+1 (2013/14) Heathrow Capital Plan Version 26 into Programme Identification programme.
								10820	CTA Potable Water Supply	Terminal 2	2	2	2	New project identified since SCBP 2012.
								10832	T2 Commercial	Terminal 2	11	11	11	Scope Transfer of T2 Commercial scope from T2 Leadership (£9.6m). Scope Transfer of Luxury Development scope from T2A Building & Stands (BCT 8802) and increase for the T2 Retail Commercial Solution Development Changes (£2m)
HET (T2A) Vacant Possessions														
H.ET.02	6634	HET VP - HMRC Decants	0	6634	T2A VP - HMRC Decants	Legacy	2	6634	T2A VP - HMRC Decants	Legacy	2		2	Scope transfers from Engineering Decant (BCT 7482)
H.ET.03	6917	HET VP - BMI Relocation	3	6917	T2A VP - BMI Relocation	Legacy	2	6917	T2A VP - BMI Relocation	Legacy	2	0	-1	
H.ET.03a	7231	HET VP - Prop decant risk/opp	3	7231	T2A VP - Capital Contributions	Legacy			7231 Project deleted				-3	Transfer of decommissioning and strip out of tenants fit out areas to QB Demolitions (BCT 8799) and reductions in scope
H.ASS.32a	4582	Sub Fire Stn Relocation Ph 2	1	4582	Sub Fire Stn Relocation Ph 2	Legacy	1	4582	Sub Fire Stn Relocation Ph 2	Legacy	1		0	
		7226 ID Centre Relocation	0	7226	ID Centre Relocation	Legacy	1	7226	ID Centre Relocation	Legacy	1		1	Design development, scope definition and schedule revisions
		7227 HET VP Airside Sec decant	0	7227	T2A VP Airside Sec decant	Legacy	4	7227	T2A VP Airside Sec decant	Legacy	4		3	Specific project derived from Airline Moves (BCT 6137) and Airline Moves CIP 2007 Budget (BCT 7714)

Heathrow Airport Limited CIP at Settlement				SCBP 2012			SCBP 2013					Significant scope changes SCBP 2013 compared with Q5 Settlement (See Footnote) <small>(NB cost refs are to outturn price)</small>		
CIP ID	BCT no.	Project Name (as at Q5 Settlement)	TOTAL	BCT no.	Project Name (as at SCBP 2012)	Delivery Programme at SCBP 2012	TOTAL	BCT no.	Project Name (as at SCBP 2013)	Delivery Programme at SCBP 2013	TOTAL		Comparison SCBP 2013 v SCBP 2012	Comparison SCBP 2013 v Settlement
				7230	P22848 - QB Staff Rest Decant	Legacy	3	7230	P22848 - QB Staff Rest Decant	Legacy	3		3	Design development, scope definition and schedule revisions. Reductions in negotiation of final account.
				7233	D'Albiac Tenant Fit Out	Legacy	2	7233	D'Albiac Tenant Fit Out	Legacy	2		2	Additional requirements to suit tenants - BT, move costs, solicitors fees, partitions, M&E, signage & IT. Heathrow requirements for IT & fire alarm. Further scope transfer from Engineering Decant (BCT 7482). Transfer of HVAC & FA scope to 2010 LPI Works (BCT 9738).
				7386	P22940 - T2A VP - Specialist Sys Decant	Legacy	1	7386	P22940 - T2A VP - Specialist Sys Decant	Legacy	1		1	Scope transfer to Specialist System Decant (BCT 8542). Design development, scope definition and schedule revisions.
				7483	T2A VP - D'Albiac Occ Health	Legacy	1	7483	T2A VP - D'Albiac Occ Health	Legacy	1		1	
				7623	T2A VP - T3 Eastwing refit	Legacy	2	7623	T2A VP - T3 Eastwing refit	Legacy	2		2	Project derived from multiple scope transfers from Engineering Decant (BCT 7482)
6918	VAA	Crew Clearance	2	6918	VAA Crew Clearance	Legacy	4	6918	VAA Crew Clearance	Legacy	4		2	Design development, scope definition and schedule revisions
				8016	P23388 - T2A VP - Customs Clearance	Legacy	1	8016	P23388 - T2A VP - Customs Clearance	Legacy	1		1	Design development, scope definition and schedule revisions
				8017	P23389 - T2A VP - QB Bussing decant	Legacy	1	8017	P23389 - T2A VP - QB Bussing decant	Legacy	1	0	1	Design development, scope definition and schedule revisions
				8434	T2A VP - Rent & Staff Costs	Legacy	3	8434	T2A VP - Rent & Staff Costs	Legacy	3		3	Rebaselining following IBR6.
				8542	HET VP - T2A Spec Sys Decant	Legacy	1	8542	HET VP - T2A Spec Sys Decant	Legacy	1		1	Scope transfer from Specialist System Decant (BCT 7386). Transfer of Risk to HAL Central Risk. Realignment of budgets following IBR 4 and 6. reductions due to final account negotiations.
				9256	T2 HAL C&B	Legacy	2	9256	T2 HAL C&B	Legacy	2		2	Scope transfer from Engineering Decant (BCT 7482). IBR6 Realignment of Budget.
Midfield Pier (T2B)/ Outer Pier (T2C)														
H.T1.07a	4539	Midfield Pier North	96	4539	T2B Phase 1	Legacy	97	4539	T2B Phase 1	Legacy	97		1	Transfer of foul pumping station from T2B NE Stands (BCT 7206). Transfer to T2 Logistics (BCT 8798). Redistribution of Explore & Options costs from T1 Parent Project (BCT 4630). Further transfer of work carried out on behalf of T2B Phase 2, for centralised on-cost. Transfer to T2B Phase 2 (BCT 4201) for ramp accommodation. Transfer from T2B Phase 2. Transfer from various projects for OP integration services.
H.T1.50	7717	Eastern Apron Outer Pier North	95	7717	Eastern Apron Outer Pier North	Legacy		7717	Project deleted				-95	Scope transferred from Relocation of Sub station 56 (BCT 7212). Deferred to future years - replaced with T2B South (BCT 4199) investment in Q5

Heathrow Airport Limited CIP at Settlement				SCBP 2012			SCBP 2013							
CIP ID	BCT No.	Project Name (as at Q5 Settlement)	TOTAL	BCT No.	Project Name (as at SCBP 2012)	Delivery Programme at SCBP 2012	TOTAL	BCT No.	Project Name (as at SCBP 2013)	Delivery Programme at SCBP 2013	TOTAL	Comparison SCBP 2013 v SCBP 2012	Comparison SCBP 2013 v Settlement	Significant scope changes SCBP 2013 compared with Q5 Settlement (See Footnote) <small>(NB cost refs are to outturn price)</small>
H.T1.38	4201	M/Pier Centre, Stnds & Pax Connectivity	190	4201	T2B Phase 2	Terminal 2	467	4201	T2B Phase 2	Terminal 2	541	74	352	Incorporation of T2B South (BCT 4199) scope plus baggage basement associated with revised T2 Baggage Masterplan. Redistribution of Explore & Options costs from T1 Parent Project (BCT 4630). Scope for Pier 3 Demolition (BCT 6716) transferred to this project. Scope transfers in from PSDH relating to TTS Funding (excluded from CIP 2010) and design & construction of baggage, passenger, service & TTS tunnels under Lima & Kilo taxiways. Scope transfer out relating to IC5 (to BCT 9805) and construction of temporary control posts to Control Post Programme (BCT 8452). Transfer of the TTS Shield Study works from T2A Phase 2 (BCT 7720). Transfer from T2B Phase 1 (BCT 4539) for ramp accommodation. Significant EAC reduction at Construction Decision. Other smaller savings and cash flow profile amendments affecting Q5 versus Q5+1/Q6 EACs. Transfer of logistics services to T2 Logistics (BCT 8798) and transfer in of airbridge scope from Additional Jetty Provision (BCT 7656). Transfer of managed services provider fees to T2 Leadership (BCT 8794). Reduction in costs due to risk allowance, project specific savings, award fee criteria and cost reviews. Inclusion of Q5+1 EAC (See footnote). Re-sequencing of the Phase 1 Refit scope to reconfigure the closed gates to open, Reduction of risk allowance.
								10856	T2B Phase 3	Terminal 2	1	1	1	New project identified since SCBP 2012 for Kilo Tunnel, Eurolounge demolition, safeguarding for the future early bag store, TTS system & baggage tunnels between T2B tunnel and the Kilo Tunnel, in line with the Q6 plan. Transfer of scope for pavement & infrastructure works for Stands 234 & 235 from T2B Phase 2 (BCT 4201).
H.T1.36	4199	Midfield Pier South	5	4199	T2B South	Legacy		4199	Project deleted				-5	Project originally allowed design in Q5 with delivery in Q5+1/Q6. In August 2008 the project delivery was reprogrammed into Q5 and at the same time the Eastern Apron Outer Pier North (BCT 7717) was reprogrammed into Q5+1/Q6 (previously was in Q5). Project was merged with T2B Phase 2 (BCT 4201) in August 2008. Redistribution of Explore & Options costs from T1 Parent Project (BCT 4630).
				10562	T1 Gemini 2 HBS Replacement	Terminal 2		10562	T1 Gemini 2 HBS Replacement	Terminal 2				Scope transferred from Baggage Product Improvements (BCT 8818).
				10472	Post Q5 Solutions D&D Studies	Programme Identification	8	10472	Post Q5 Solutions D&D Studies	Programme Identification	14	6	14	New project formed by transfer of surplus T2A Phase 2 Q5 design fund for Q5+1/Q6 work from T2A Phase 2 (BCT 7720). Transfer of Self Bag Drop scope to new project (BCT 10564). Transfer of the remaining scope from T2A Ph2 Baggage System (BCT 7654). Incorporation of new Programme Identification scope included in the Q5+1 (2013/14) Heathrow Capital Plan Version 26. Scope transfer from 8818 & 7664 so that projects can be finalised and BCTs closed.
				10709	T2 Intellectual Projects	Terminal 2	0	10709	T2 Intellectual Projects	Terminal 2	0	0	0	Scope increase associated with the T2 Intellectual Works (all costs up to and including Options Decision, G2, on all T2 projects) that has been endorsed by the Change Board & CIP Working Group in February 2012.
Terminal 3														
H.T3.39	7150	T3 Zone A Virgin Contribution		7150	T3 Zone A Virgin Contribution	Legacy	-1	7150	T3 Zone A Virgin Contribution	Legacy	-1		-1	
H.T3.18	3656	T3 Forecourt Redevelopment		3656	T3 Forecourt Redevelopment	Legacy	2	3656	T3 Forecourt Redevelopment	Legacy	2		2	New scope identified at CIP 2010 for enhanced forecourt capacity and passenger experience, improved pedestrian connectivity and wayfinding and kerbside check-in facilities.
	6476	T3 Kerbside check in		6476	T3 Kerbside check in	Legacy	-1	6476	T3 Kerbside check in	Legacy	-1		-1	

All Costs in 07/08 Comparative Prices

Heathrow Airport Limited CIP at Settlement				SCBP 2012			SCBP 2013					Significant scope changes SCBP 2013 compared with Q5 Settlement (See Footnote) (NB cost refs are to outturn price)		
CIP ID	BCT No.	Project Name (as at Q5 Settlement)	TOTAL	BCT No.	Project Name (as at SCBP 2012)	Delivery Programme at SCBP 2012	TOTAL	BCT No.	Project Name (as at SCBP 2013)	Delivery Programme at SCBP 2013	TOTAL		Comparison SCBP 2013 v SCBP 2012	Comparison SCBP 2013 v Settlement
H.T3.22a	7593	T3 Zone B-G Upgrade	4	7593	T3 Zone B-G Upgrade	Legacy	14	7593	T3 Zone B-G Upgrade	Legacy	14		10	Scope transferred from T3 Refurbishments (BCT 6714)
H.T3.22	6714	T3 Refurbishments	48	6714	T3 Refurbishments	Legacy	0	6714	T3 Refurbishments	Legacy	0		-48	Scope transferred to discrete projects for delivery of refurbishment scope (BCTs 7593, 8406, 8510, 8511, 8563, 8569 & 9222)
				8563	Immigration Hall Refurb	Terminal Restoration & Modernisation	20	8563	Immigration Hall Refurb	Terminal Restoration & Modernisation	20	0	20	Scope transferred from T3 Refurbishments line in CIP 2008 (BCT 6714). Further scope transferred from Terminal Restoration & Modernisation associated with Self Service Border Control (from BCT 4242) and revisions to Heathrow internal costs, IT systems & insurance
				8569	T3 Baggage Hall Refit	Legacy	0	8569	T3 Baggage Hall Refit	Legacy	0	0	0	Scope transferred from T3 Refurbishments line in CIP 2008 (BCT 6714)
H.T3.41	9222	T3 Additional Departures Security Lanes - SQR	2	9222	T3 CSA	Legacy	13	9222	T3 CSA	Legacy	13	0	11	Scope transferred from T3 Refurbishments line in CIP 2008 (BCT 6714) for the refurbishment of the Terminal 3 Central Search Area. Subsequent procurement efficiencies and re-evaluation of risks
H.T3.42	2	T3 Additional Transfer Security Lanes - SQR	21	9223	T3 Connections Security SQR	Terminal Restoration & Modernisation	8	9223	T3 Connections Security SQR	Terminal Restoration & Modernisation	8	0	-13	Procurement efficiencies since CIP 2010 due to combining the project with the Central Search Area and Landside Departures (BCT 4369) plus savings against project specific allowances included in the CBI tender
	8406	Pier 7 Connector Refurb		8406	Pier 7 Connector Refurb	Legacy	11	8406	Pier 7 Connector Refurb	Legacy	11	0	11	Scope transferred from T3 Refurbishments line in CIP 2008 (BCT 6714)
				8510	Landside Departures 1st Floor	Legacy	4	8510	Landside Departures 1st Floor	Legacy	4	0	4	Scope transferred from T3 Refurbishments line in CIP 2008 (BCT 6714). Minor reductions following CIP 2011
				8494	Pier 5 Gateroom Enclosures	Legacy	2	8494	Pier 5 Gateroom Enclosures	Legacy	2		2	New scope requirement approved in 2008
				9269	T3 Transformation Scope Gap 09	Legacy	3	9269	T3 Transformation Scope Gap 09	Legacy	3	0	3	New scope identified at CIP 2010 for provision of additional check-in capacity (including CUSS) secondary search in Pier 5, wayfinding and queue management. Scope transfer to T3 VAT Reclaim Desk (BCT 9379)
H.T3.38	5094	Pier 5 Departures Walkway	6	5094	Pier 5 Departures Walkway	Legacy	5	5094	Pier 5 Departures Walkway	Legacy	5		-1	
H.T3.07a	3876	T3 Pier 7 Horizontal Segregat	3	3876	T3 Pier 7 Horizontal Segregation	Legacy	3	3876	T3 Pier 7 Horizontal Segregation	Legacy	3		0	
H.T3.19	3829	MARSing stnd 324 - 330 & CTA 5	18	3829	MARSing STND 324 - 330 & CTA 5	Legacy		3829	Project deleted				-18	Project deferred to future years, no requirement in O5.
H.T3.31	4214	Pier 7 Redevelopment & Stands	5	4214	Pier 7 Redevelopment & Stands	Legacy		4214	Project deleted				-5	Scope review and transfer of scope to a new project, O6 Strategy Western Campus D&D (BCT 10440) to support design and development of Q5+ 1/O6 work.
				8002	Pier 7 stands works	Legacy	3	8002	Pier 7 stands works	Legacy	3	0	3	New scope identified at IBR4.
H.T3.36	4243	T1 P4A Wst Demo & 4 rem J5 Stn	8	4243	T1 P4A Wst Demo & 4 rem J5 Stn	Legacy	3	4243	T1 P4A Wst Demo & 4 rem J5 Stn	Legacy	3	0	-5	Project reprogrammed following CIP 2008 & brought forward to O8/O9 in response to airline moves sequence, originally scheduled for O9/10 delivery. Redistribution of Explore & Options costs from T1 Parent Project (BCT 4630). Scope transfers to T1 Arrivals & Departures (BCT 4075) and T1 Displacements (BCT 6944).
				9310	T3 Additional Jetty Provision	Legacy	3	9310	T3 Additional Jetty Provision	Legacy	3	0	3	Scope transfer of A380 jetties on Pier 6 stands from Additional Jetty Provision (BCT 7656).
				9508	Pier 5 A380 Stands	Capacity Optimisation	6	9508	Pier 5 A380 Stands	Capacity Optimisation	6	0	6	New scope identified at CIP 2010. Realigning in accordance with IBR 6. Realigning at approved Construction Decision stage.
				9379	T3 VAT Reclaim Desk	Legacy	1	9379	T3 VAT Reclaim Desk	Legacy	1	0	1	Scope increase and transfer from T3 Transformation Scope Gap 09 (BCT 9269).
				9648	T3 UKBA Watch House & SO15 Accommodation	Terminal Restoration & Modernisation	2	9648	T3 UKBA Watch House & SO15 Accommodation	Terminal Restoration & Modernisation	2	0	2	New scope as part of CIP 2010 reprioritisation.

Heathrow Airport Limited CIP at Settlement				SCBP 2012			SCBP 2013							
CIP ID	BCT No.	Project Name (as at Q5 Settlement)	TOTAL	BCT No.	Project Name (as at SCBP 2012)	Delivery Programme at SCBP 2012	TOTAL	BCT No.	Project Name (as at SCBP 2013)	Delivery Programme at SCBP 2013	TOTAL	Comparison SCBP 2013 v SCBP 2012	Comparison SCBP 2013 v Settlement	Significant scope changes SCBP 2013 compared with Q5 Settlement (See Footnote) <small>(NB cost refs are to outturn price)</small>
				9653	T3 IDL Transformation	Terminal Restoration & Modernisation	4	9653	T3 IDL Transformation	Terminal Restoration & Modernisation	4	0	4	New scope as part of CIP 2010 reprioritisation. Transfer of strip out works and other items from 2011 - 2012 Minor Projects (BCT 10232). Transfer of scope from T3IB (BCT 3801) for the installation of a temporary corridor within Gateroom 24.
				9654	T3 Check-In Enhancements	Terminal Restoration & Modernisation	2	9654	T3 Check-In Enhancements	Terminal Restoration & Modernisation	2	1	2	New scope identified at CIP 2010 to provide a standardised approach to T3 check-in Zones B - G and to reduce passenger congestion, promote CUS\$ usage and update wayfinding. Incorporation of new scope included in the Q5+1 (2013/14) Heathrow Capital Plan Version 26. Transfer of scope to Minor Projects (BCT 10232) for the removal of the staircases to Zones E & F, the centralisation of the cul de sac escalators and associated concourse and departures level works. Scope decrease for Hammerhead works.
				10652	T3 CIP Lounge Remedial Works	Terminal Restoration & Modernisation	4	10652	T3 CIP Lounge Remedial Works	Terminal Restoration & Modernisation	5	1	5	Additional scope identified since CIP 2011 for the general improvement of the CIP lounge. Cost increased to align with approved option.
				10636	T3 Lima 18	Western Baggage Product	1	10636	T3 Lima 18	Western Baggage Product	0	-1	0	New project created with scope from Baggage Product Improvements (BCT 8818).
				10625	Terminal 3 Roof Repair	Portfolio of Projects	1	10625	Terminal 3 Roof Repair	Portfolio of Projects	9	8	9	Additional scope identified since CIP 2011. Inclusion of Q5+1 EAC (See footnote). Incorporation of new scope included in the Q5+1 (2013/14) Heathrow Capital Plan Version 26 for Q6, which has subsequently been reprogrammed to Q5+1.
				10632	T3 SCADA	Western Baggage Product	3	10632	T3 SCADA	Western Baggage Product	2	-1	2	Additional scope identified since CIP 2011 (as approval at Brief Decision) for the replacement of T3 SCADA. Scope transferred from Baggage Product Improvements (BCT 8818). EAC reduced at gateway G2.
				10653	T3 Pier 7 Gateroom Lifts	Terminal Restoration & Modernisation	1	10653	PRM Lifts	Terminal Restoration & Modernisation	6	4	6	Project initially included additional scope identified since CIP 2011 to improve the process for delivering oversized hand luggage from T3 Pier 7 gaterooms to the aircraft hold. Project renamed at SCBP 2013 and new PRM Lifts Aiside scope included from the Q5+1 (2013/14) Heathrow Capital Plan Version 26.
				10640	T3 Check in Zone A&B Porches	Terminal Restoration & Modernisation	1	10640	T3 Check in Zone A&B Porches	Terminal Restoration & Modernisation	1	0	1	Additional scope identified since CIP 2011 to provide an entrance porch to zone A & B in line with the other entrances from the T3 forecourt into check-in.
				10664	Proof of Concept Self Bag Drop	Capacity Optimisation	5	10664	Proof of Concept Self Bag Drop	Terminal Restoration & Modernisation	12	7	12	Transfer of Self Bag Drop scope from Post Q5 Solutions D&D Studies (BCT 10472). Incorporation of new scope included in the Q5+1 (2013/14) Heathrow Capital Plan Version 26.
				10554	T3 South Wing HVAC Replacement	Terminal Restoration & Modernisation	4	10554	T3 South Wing HVAC Replacement	Terminal Restoration & Modernisation	4	0	4	Additional scope identified since CIP 2011. Compensating reduction made in Security Projects (BCT 9213).
				10682	T3 Pier 5 Capacity Phase 2-3	Capacity Optimisation	3	10682	T3 Pier 5 Capacity Phase 2-3	Capacity Optimisation	7	5	7	Additional scope identified since CIP 2011. Gateroom 340 A380 capacity / Pier 5 Phase 2 refurbishment. Inclusion of Q5+1 EAC (See footnote). Scope for Phase 3 refurbishment returned and allocated to T3 Refurbishment (BCT 10711).
				10711	T3 Landside Arrivals	Terminal Restoration & Modernisation	1	10711	T3 Refurbishment Programme	Terminal Restoration & Modernisation	15	14	15	Additional scope identified since CIP 2011 and increased after SCBP 2012 for check-in flooring and work to Piers 5 and 7. Partly offset by scope reduction of the Phase 3 refurbishment in the Q5+1 (2013/14) Heathrow Capital Plan Version 26 which was included in T3 Pier 5 Capacity Phase 2-3 (BCT 10682).
								10802	Loading Bay Enhancements T3 & T4	Capacity Optimisation	1	1	1	Incorporation of new scope included in the Q5+1 (2013/14) Heathrow Capital Plan Version 26 for loading bay enhancements to T3 and T4.

Heathrow Airport Limited CIP at Settlement				SCBP 2012			SCBP 2013					Significant scope changes SCBP 2013 compared with Q5 Settlement (See Footnote) (NB cost refs are to outturn price)		
CIP ID	BCT No.	Project Name (as at Q5 Settlement)	TOTAL	BCT No.	Project Name (as at SCBP 2012)	Delivery Programme at SCBP 2012	TOTAL	BCT No.	Project Name (as at SCBP 2013)	Delivery Programme at SCBP 2013	TOTAL		Comparison SCBP 2013 v SCBP 2012	Comparison SCBP 2013 v Settlement
Terminal 5														
H.T5.14	6136	PicEx Station Works	18	9382	PicEx Station Works - LUL	Portfolio of Projects	19	9382	PicEx Station Works - LUL	Portfolio of Projects	19	0	1	Alignment in accordance with IBR6. Reduction due to revised agreement between Heathrow and LUL.
								10738	Terminal 5 Firestorm	Portfolio of Projects	2	2	2	New scope identified after SCBP 2012 for T5 Kitchen Extract as endorsed by CIP Working Group in December 2012.
								10803	T5 CTA and Domestic Capacity	Capacity Optimisation	2	2	2	Incorporation of new scope included in the OS+1 (2013/14) Heathrow Capital Plan Version 26 for Additional Domestic & Introduction of Common Travel Area Capacity in T5A.
								10808	T5 Landside Lifts	Terminal Restoration & Modernisation	0	0	0	Incorporation of new scope included in the OS+1 (2013/14) Heathrow Capital Plan Version 26 for provision of additional T5 Landside Lifts.
								10816	T5 Gate Luxury	Terminal Restoration & Modernisation	4	4	4	Incorporation of new scope included in the OS+1 (2013/14) Heathrow Capital Plan Version 26 for reconfiguration and design improvement of T5 Gate level south to improve visibility, flow and unit frontage.
T5C														
H.T5.28	5221	T5C Q5 Expenditure	260	5221	Heathrow Terminal T5C	Terminal Restoration & Modernisation	323	5221	Heathrow Terminal T5C	Terminal Restoration & Modernisation	323	0	63	Scope of T5C Dock Weathering transferred in from T5C Weather Proof BA Baggage Docks (BCT 9657) and Wayfinding from T5C Transfers (BCT 9655). T5C Extension 10-1 2 Pier Served Stands scope transferred to this project. Delivery of airfield and stands work transferred from T5C Q5 Expenditure (BCT 5221). Minor scope transfers to 2011-2012 Minor Projects (BCT 10232) and T5C Minor Works (BCT 10571). Minor transfer of scope to replace fixed link infill panels and solar film to T5C Minor Works (BCT 10571).
	8735	T5 Phase 2 Airfield works		8735	T5 Phase 2 Airfield Works	Legacy	26	8735	T5 Phase 2 Airfield Works	Legacy	27	1	27	Scope transferred from Heathrow Terminal T5C (BCT 5221) for delivery of airfield and stands works by Pavement team.
H.T5.28a		T5C Extension 10 - 1.2 Pier Served Stands	25										-25	Q5 scope transferred to Heathrow Terminal T5C (BCT 5221) via T5C Additional Stands (BCT 7663) for delivery.
H.A55.53	7663	T5C Additional Stands	5	7663	T5C Additional Stands	Legacy		7663	Project deleted				-5	Q5 scope transferred to Heathrow Terminal T5C (BCT 5221) for delivery.
				8335	T5 Phase 2 Early Stands	Legacy	7	8335	T5 Phase 2 Early Stands	Legacy	7		7	Scope transferred from T5C (BCT 5221) for delivery of airfield and stands works by Pavement team. Reductions since CIP 2010 due to final account negotiations
				9575	T5 CSA and Connections Capacity	Terminal Restoration & Modernisation	8	9575	T5 CSA and Connections Capacity	Terminal Restoration & Modernisation	8	0	8	Additional scope identified at IBR6. Scope refined and cost reviewed at Construction Decision in October 2011. Transfer of scope to create new project for Phase 2: T5 Connections Security (BCT 10841).
				9655	T5C Transfers	Legacy		9655	T5C Transfers	Legacy				Transfer of wayfinding scope to Heathrow Terminal T5C (BCT 5221)
				10705	T5C Airbridges - 3rd Jetties on Remaining A380 Stand	Terminal Restoration & Modernisation	1	10705	T5C Airbridges - 3rd Jetties on Remaining A380 Stand	Terminal Restoration & Modernisation	2	1	2	New scope for T5C Airbridges - 3rd jetties on remaining A380 stands. EAC increased in February 2013.
				10323	T5 North CSA Improvement	Terminal Restoration & Modernisation	1	10323	T5 North CSA Improvement	Terminal Restoration & Modernisation	1	0	1	New project created with scope transferred from Security Projects (BCT 9213).
				10448	T5 TTS Enhancements	Capacity Optimisation	13	10448	T5 TTS Enhancements	Capacity Optimisation	27	14	27	New scope to improve the passenger experience and resilience of the T5 TTS Operation. Inclusion of OS+1 EAC (See footnote). Savings generated in February 2013.

Heathrow Airport Limited CIP at Settlement				SCBP 2012			SCBP 2013					Significant scope changes SCBP 2013 compared with Q5 Settlement (See Footnote) <small>(NB cost refs are to outturn price)</small>		
CIP ID	BCT No.	Project Name (as at Q5 Settlement)	TOTAL	BCT No.	Project Name (as at SCBP 2012)	Delivery Programme at SCBP 2012	TOTAL	BCT No.	Project Name (as at SCBP 2013)	Delivery Programme at SCBP 2013	TOTAL		Comparison SCBP 2013 v SCBP 2012	Comparison SCBP 2013 v Settlement
				10641	T5 A380 GIDS	Terminal Restoration & Modernisation	1	10641	T5 A380 GIDS	Terminal Restoration & Modernisation	1	-1	1	New scope to provide Gate Information Displays in T5 to enable an efficient multi-airbridge boarding operation of the A380 aircraft. Savings generated in September 2012.
				10571	T5C Minor Works	Terminal Restoration & Modernisation	1	10571	T5C Minor Works	Terminal Restoration & Modernisation	1	0	1	New project created with minor operational readiness scope, including non-critical wayfinding, transferred from Heathrow Terminal T5C. (BCT 5221).
Terminal 4														
H.T4.01	3831	T4 Check-in Capacity	40	3831	T4 Check-in Capacity	Legacy	88	3831	T4 Check-in Capacity	Legacy	88	0	48	Scope transfers from T4 Refurbishment (BCT 6693) for Check-in refurbishment and rebalancing of IDL scope and T4 Arrivals. Prolongation costs associated with airline move sequence delays post T5 opening. Increase relating to Q5 budget setting exercise. Transfer from suspense account in accordance with IBR4. Reduction in estimated cost following final account negotiations
H.T4.06a	2304	Arrivals Enhancements/A380	5	2304	Arrivals Enhancements/A380	Legacy			Project deleted				-5	Scope transferred to T4 Refurbishment project (BCT 6693) for delivery
H.T4.01a	7648	Terminal 4 Check In Ph2	5	7648	Terminal 4 Check In Ph2	Legacy			Project deleted				-5	Scope transferred to T4 Check-in Extension (BCT 3831)
H.T4.03	6693	Terminal 4 Refurbishment	42	6693	Terminal 4 Refurbishment	Legacy	11	6693	Terminal 4 Refurbishment	Legacy	11		-31	Elements of scope and budget transferred to T4 Check-in project (BCT 3831), includes check-in refurb scope and budgets associated with IDL and baggage reclaim refurb. Scope transfers to Transfers Security project to deliver T4 arrivals and immigration refurb scope of works. Scope transfer received from Arrivals Enhancements/A380 (BCT 2304) and T4 Additional Departures Security Lanes (BCT 3). Scope transfer to T4 Additional Security Lanes - SQR (BCT 9028). Reduction in EAC following final account negotiations.
H.T4.15	3	T4 Additional Departures Security Lanes - SQR	6	3	T4 Additional Departures Security Lanes - SQR	Legacy			Project deleted				-6	Scope transferred to T4 Refurbishment (BCT 6693) for delivery.
H.T4.16	8008	T4 Open Skies Lanside Offices	1	8008	T4 Open Skies Lanside Offices	Legacy	0	8008	T4 Open Skies Lanside Offices	Legacy	0		-1	
H.T4.17	9028	T4 Additional Transfer Security Lanes - SQR	4	9028	T4 Additional Transfer Security Lanes	Legacy	7	9028	T4 Additional Transfer Security Lanes	Legacy	7		3	Scope transfers from T4 Refurbishment for delivery (BCT 6693). Realignment in accordance with IBR6.
				8274	T4 Flooring	Legacy	1	8274	T4 Flooring	Legacy	1		1	
H.T4.08	2303	T4 A380 Stand/Gate Provision	9	2303	T4 A380 Stand/Gate Provision	Legacy	22	2303	T4 A380 Stand/Gate Provision	Legacy	22		13	Scope transferred in from T4 Airline Relocations (BCT 6604) for delivery of new CIP Lounge provision. Entire T4 A380 Stands project (BCT 2303) transferred to this project.
H.T4.12	3842	T4 Remote JX Stands	3	3842	T4 Remote JX Stands	Legacy			Project deleted				-3	Project scope merged with Western Campus A380 Stands (BCT 3841)
H.T4.11	3841	T4 JX Stands - Phase 2	2	3841	Western Campus A380 Stands	Capacity Optimisation	3	3841	Western Campus A380 Stands	Capacity Optimisation	3	0	1	T4 Remote JX Stands (BCT 3842) merged with this project. Savings generated at Brief Decision, in November 2011 and in February 2013.
				9643	T4 Arrivals Concourse	Legacy	6	9643	T4 Arrivals Concourse	Legacy	6	0	6	New scope added at IBR6 for the creation of additional capacity on the landside arrivals corridor. Scope reduction since CIP 2010 due to the deletion of the mezzanine corridor scope of works.
				9644	T4 Departures Phase 2	Terminal Restoration & Modernisation	16	9644	T4 Departures Phase 2	Terminal Restoration & Modernisation	20	4	20	New scope added at IBR6 for the refurbishment of the IDL gate areas and piers to produce a co-ordinated design throughout the whole of the Departures level. Scope reduction since CIP 2010 in specification of the works to ceilings and lighting in the IDL. Incorporation of additional scope endorsed by CIP Working Group in April 2012 for refurbishment of air handling plant and ceilings in departures lounge, new seating and refurbishment of additional areas of gates 7, 8 and 9.

Heathrow Airport Limited CIP at Settlement				SCBP 2012			SCBP 2013				Significant scope changes SCBP 2013 compared with Q5 Settlement (See Footnote) (NB cost refs are to outturn price)			
CIP ID	BCT No.	Project Name (as at Q5 Settlement)	TOTAL	BCT No.	Project Name (as at SCBP 2012)	Delivery Programme at SCBP 2012	TOTAL	BCT No.	Project Name (as at SCBP 2013)	Delivery Programme at SCBP 2013		TOTAL	Comparison SCBP 2013 v SCBP 2012	Comparison SCBP 2013 v Settlement
	9645	T4 Baggage Reclaim Hall Refurb			T4 Baggage Reclaim Hall Refurb	Legacy	0	9645	T4 Baggage Reclaim Hall Refurb	Legacy	0		0	Scope added at IBR6 following CIP reprioritisation. Transfer of complete project, T4 Baggage Belts A380 (BCT 9647) to this project followed by transfer of scope to Baggage Programme for delivery of construction phase of the fit out of the T4 Baggage Reclaim Hall. Entire scope transferred to T4 Baggage Works, Steps 9 & 9A (BCT 9516)
	9647	T4 Baggage Belts A380			T4 Baggage Belts A380	Legacy		9647	Project deleted					Entire scope transferred to T4 Baggage Reclaim Hall Refurb (BCT 9645).
	2304	Arrivals Enhancements/A380			Arrivals Enhancements/A380	Legacy		2304	Project deleted					Scope transferred to T4 Refurbishment project (BCT 6693) for delivery
	9646	T4 Cat B Accommodation			T4 Cat B Accommodation	Terminal Restoration & Modernisation	1	9646	T4 Cat B Accommodation	Terminal Restoration & Modernisation	2	1	2	New scope identified at CIP 2011 for Cat B office accommodation for Air India move from T3 to T4.
	9844	T4 Airbridge Replacement			T4 Airbridge Replacement	Terminal Restoration & Modernisation	5	9844	T4 Airbridge Replacement	Terminal Restoration & Modernisation	12	7	12	New scope identified since CIP 2010 for the replacement of 10 No. airbridges at T4. Scope transfers from Additional Jetty Provision (BCT 7656), LP11 - Inviron (BCT 9106) and 2010 LPI Works (BCT 9738). Incorporation of new scope included in the Q5+1 (2013/14) Heathrow Capital Plan Version 26 for Remaining T4 Airbridge Asset Replacement and scope increase endorsed by CIP Working Group for the progression of 4 additional airbridges.
	9944	T4 Off Pier Coaching			T4 Off Pier Coaching	Legacy	1	9944	T4 Off Pier Coaching	Legacy	1		1	New scope identified at CIP 2011 due to incoming airlines into Terminal 4 in November 2010 there was a requirement for additional facilities to fulfil demand during the evening peak.
	9951	T4 Interim VIP suite			T4 Interim VIP suite	Legacy	1	9951	T4 Interim VIP suite	Legacy	1		1	New scope identified before CIP 2011. In order to vacate the current Terminal 4 Spelthorne Suite, as a key enabler to the Baggage Reclaim Hall works, it was necessary to create an interim VIP suite solution at Terminal 4.
	10376	T4 Baggage Arrivals			T4 Baggage Arrivals	Capacity Optimisation	3	10376	T4 Baggage Arrivals	Western Baggage Product	2	0	2	New project for arrivals scanners on T4 Reclaims 1-7 and Out of Gauge works on Reclaim 6 & 7 created with scope transferred from T4 Baggage Works, Steps 9 & 9A project (BCT 9516) and Baggage Product Improvements (BCT 8818). Scope transferred to LHS OCL & RAP7 + HB5 (BCT 10378).
	10429	T4 Baggage Reclaim Hall Expansion			T4 Baggage Reclaim Hall Expansion	Capacity Optimisation	0	10429	T4 Baggage Reclaim Hall Expansion	Capacity Optimisation	17	16	17	Scope increase endorsed by the CIP Working Group in June 2012 for the design 2 new A380 belts, delivery of a single belt and creating new reclaim hall floor space.
	10365	T4 Baggage Reclaim Hall (R1-R7) Fit Out			T4 Baggage Reclaim Hall (R1-R7) Fit Out	Terminal Restoration & Modernisation	7	10365	T4 Baggage Reclaim Hall (R1-R7) Fit Out	Terminal Restoration & Modernisation	7	1	7	New project created with scope transferred from T4 Baggage Works, Steps 9 & 9A project (BCT 9516). Scope increase for refurbishing the T4 Customs Channel Ceilings area.
	10377	T4 ABF 1-75 (Phase 2)			T4 ABF 1-75 (Phase 2)	Capacity Optimisation	3	10377	T4 ABF 1-75 (Phase 2)	Capacity Optimisation	5	2	5	New project created with scope transferred from T4 Baggage Works, Steps 9 & 9A project (BCT 9516). Inclusion of Q5+1 EAC (See footnote).
	10549	T4 ABF Building Works			T4 ABF Building Works	Capacity Optimisation	1	10549	T4 ABF Building Works	Capacity Optimisation	1	0	1	New project created with scope transferred from T4 Baggage Works, Steps 9 & 9A project (BCT 9516)
	10561	T4 Call Forward Automation			T4 Call Forward Automation	Capacity Optimisation	1	10561	T4 Call Forward Automation	Western Baggage Product	1	0	1	Scope transferred from Baggage Product Improvements (BCT 8818).
	10708	Q5 CO Intellectual Works			Q5 CO Intellectual Works	Capacity Optimisation	1	10708	Q5 CO Intellectual Works	Capacity Optimisation	1	0	1	Scope Increase associated with the Capacity Optimisation Intellectual Works (all costs up to and including Options Decision, G2, on all Capacity Optimisation projects) that has been endorsed by the Change Board & CIP Working Group in February 2012
	10440	Q6 Strategy Western Campus D&D			Q6 Strategy Western Campus D&D	Programme Identification	2	10440	Q6 Strategy Western Campus D&D	Programme Identification	2	0	2	New project to support the design and development for Q5+1/Q6 work formed by transfer of scope from T3 Departures/Check-in Development Phase 2 (BCT 3828) and Pier 7 Development & Stands (BCT 4214). Scope transfers to individual projects once confirmed as valid projects.

Heathrow Airport Limited CIP at Settlement				SCBP 2012			SCBP 2013								
CIP ID	BCT no.	Project Name (as at Q5 Settlement)	TOTAL	BCT no.	Project Name (as at SCBP 2012)	Delivery Programme at SCBP 2012	TOTAL	BCT no.	Project Name (as at SCBP 2013)	Delivery Programme at SCBP 2013	TOTAL	Comparison SCBP 2013 v SCBP 2012	Comparison SCBP 2013 v Settlement	Significant scope changes SCBP 2013 compared with Q5 Settlement (See Footnote) (NB cost refs are to outturn price)	
								10822	T4 NE Gate Area Reconfiguration	Terminal Restoration & Modernisation	2	2	2	New project created after SCBP 2012 for the incremental refurbishment and reconfiguration of the gate area, in line with current stand usage T4 General Retail Improvements scope in the Q5+1 (2013/14) Heathrow Capital Plan Version 26 reduced in the Intellectual Projects Delivery Scope project (BCT 10793).	
Baggage															
H.ET.01c	7658	Baggage Tunnel HET - MFP/ T2A to MFP	2	7658	Baggage Tunnel T2A - MFP	Legacy		7658	Project deleted					-2	Project scope now included in other studies - design element in T2A Phase 2 (BCT 7720)
H.ET.01b	7664	HET Ph2 Baggage System/ T2A Phase 2 Baggage	23	7664	T2A Ph2 Baggage System	Programme Identification	1	7664	T2A Ph2 Baggage System	Programme Identification	1	0	-22	Expenditure deferred to future years. Further reduction in Q5 awaiting scope definition following East/West development decision.	
H.T3.12	3801	T3 Integrated Baggage System	231	3801	T3 Integrated Baggage System	Western Baggage Product	225	3801	T3 Integrated Baggage System	Western Baggage Product	302	77	71	Scope transfer from Baggage Product Improvements (BCT 8818). Project was put on hold during autumn 2010 for a review of cost and options. Following a 3 month review an option was agreed (November 2010). Revised EAC impacts both Q5 and future years. Airlines agreed to fund this Q5 increase from PSD4. The HBS scope was transferred to a new project (BCT 10094) in order to meet the delivery timescales for standard II HBS (September 2012). Following reviews of the schedule, costs moved between Q5, Q5+1 and Q6. Inclusion of Q5+1 EAC. (See footnote). EAC increase at Targets Confirmation gateway.	
H.CX.13b	3798	T4 Sorter Replacement	6	3798	T4 Sorter Replacement	Legacy	8	3798	T4 Sorter Replacement	Legacy	8		2	EAC increase at CIP 2010 due to cost challenge.	
H.CX.21	4984	Scada upgrade	0	4984	Scada upgrade	Legacy	2	4984	Scada upgrade	Legacy	2	0	2	Q4 planned spend delivered in Q5 & impact of Switch 2 delay on programme. Budget transferred from Baggage Product Improvements (BCT 8818)	
H.CX.01	615	HBS VIVID replacement prog	48	615	HBS VIVID replacement prog	Legacy	5	615	HBS VIVID replacement prog	Legacy	5		-43	Scope transferred for delivery to T1 Baggage project (BCT 9355) and T4 Baggage (BCT 9516). Scope transfer from T1 HBS & Transfer Baggage System (BCT 3823) for MVT-HR machines.	
H.CX.18	4191	Manual Handling Aids	36	4191	Manual Handling Aids	Legacy	0	4191	Manual Handling Aids	Legacy	0		-36	Scope transfers for automation trials and scope of works in T3 Integrated Baggage System (BCT 3801) and Automation Prove Out (BCT 9022). Remaining scope transferred to new T1 Transitions project (BCT 10309) via 9853 to simplify delivery of the works	
H.CX.07	1851	Post T5 Transfer Baggage Syst	233	1851	Post T5 Transfer Baggage System	Western Baggage Product	227	1851	Post T5 Transfer Baggage System	Western Baggage Product	227	0	-6	Early procurement of materials for T5C, Western Interface Building (WIB) and Eastern Interface Building (EIB) shafts. Deletion of EIB due to change in strategy reflected in Eastern Campus Master Plan Option 6 as it is no longer possible to have an above ground EIB. Further design/development and scope transfer from Baggage Product Improvements (BCT 8818).	
H.CX.08	3810	Syst Baggage Cx: refit T1 - T4	16	3810	System Baggage Cx refit T1 - T4	Legacy	5	3810	System Baggage Cx refit T1 - T4	Legacy	5		-11	Scope of works reduced from replacement to refurbishment. Transfer of future scope, as at November 2010, to new T1 Transitions project (BCT 10309) via 9853 to simplify delivery of the remaining works in line with the T2 Baggage strategy	
H.NBU.15	4242	Self Service Border Clearance	11	4242	Self Service Border Control	Terminal Restoration & Modernisation	9	4242	Self Service Border Control	Terminal Restoration & Modernisation	8	-2	-3	Self service border control work transferred to Immigration Hall Refurbishment (BCT 8563). Scope reduction associated with the ACS+ works that cannot be capitalised.	
H.CX.09	3797	Baggage Hall Environment	4	3797	Baggage Hall Environment	Legacy		3797	Project deleted				-4	Project deleted - scope transferred to Baggage Product Improvement (BCT 8818).	

Heathrow Airport Limited CIP at Settlement				SCBP 2012				SCBP 2013				Significant scope changes SCBP 2013 compared with Q5 Settlement (See Footnote) (NB cost refs are to outturn price)		
CIP ID	BCT no.	Project Name (as at Q5 Settlement)	TOTAL	BCT no.	Project Name (as at SCBP 2012)	Delivery Programme at SCBP 2012	TOTAL	BCT no.	Project Name (as at SCBP 2013)	Delivery Programme at SCBP 2013	TOTAL		Comparison SCBP 2013 v SCBP 2012	Comparison SCBP 2013 v Settlement
H.CX.03b	3871	Baggage Combined Control Cntrs	6	3871	Baggage Combined Control Centres	Capacity Optimisation	0	3871	Baggage Combined Control Centres	Capacity Optimisation	6	5	0	Scope transfer to Baggage Product Improvement (BCT 8818) in order to be redistributed within Baggage programme to offset the Q5 EAC challenge. Further de-scoping from Q5 to Q5+1.
H.CX.11b	3873	Performance Management.	2	3873	Performance Management	Legacy		3873	Project deleted				-2	Project de-scoped from Q5 under CIP reprioritisation at IBR6
H.CX.22	7969	Terminal 4 Open Skies Baggage	11	7969	Terminal 4 Open Skies Baggage	Legacy	7	7969	Terminal 4 Open Skies Baggage	Legacy	7	0	-5	Switch 2 delay impacted programme by significantly reducing available working window prior to Steps 5, 6, 7 moves. Aligned in accordance with IBR6.
				8614	Baggage Ctgy (Bldg 560)	Legacy	3	8614	Baggage Ctgy (Bldg 560)	Legacy	3		3	New project created after the opening of Terminal 5 to provide a contingency facility for airlines to process bags in the event of a facility failure.
				8818	Baggage Product Improvements	Programme Identification	1	8818	Baggage Product Improvements	Programme Identification	0	-1	0	Allowance for Baggage product Improvement projects agreed as part of CIP reprioritisation. Scope transfer from Baggage Hall Environment (BCT 3797). Scope transfers to individual projects mainly for specific design of baggage product improvements and implementation eg. Scada Upgrade (BCT 4984), T4 Baggage Works for Step 9 (BCT 9516), T5 DCV Bypass (BCT 9527), T3 HBS Replacement (BCT 10094), T3 Integrated Baggage System (BCT 3801), Arrivals Scanners on T4 reclaims 1 to 7 to T4 Baggage Arrivals (BCT 10376), T4 SAC solution to T4 SAC Replacement project (BCT 10449), T4 Call Forward project (BCT 10561), T4 APV HBS Replacement Project (BCT 10545), T1 Gemini HBS Replacement Project (BCT 10562), T5 Can Store project (BCT 10606), Post T5 Transfer Baggage System (BCT 1851), T3 SCADA Replacement project (BCT 10632), T3 Lima 18 project (BCT 10636), skimming chutes to T4 Baggage Arrivals (BCT 10376) and T5 Bag Check (BCT 10663). Scope transfer to BCT 10472 so that project can be finalised and BCT closed.
				9022	Automation Prove Out	Legacy	3	9022	Automation Prove Out	Legacy	3		3	Project undertaken to identify the benefits of automation; funds from Manual Handling Aids (BCT 4191)
				9355	HBS Replacement	Legacy	0	9355	HBS Replacement	Legacy	0		0	Scope transferred from HBS VIVID replacement programme (BCT 615) then entire scope subsequently transferred to T1 Baggage Prolongation Programme (BCT 9351).
				9397	T4 Baggage Airline Moves - T408	Legacy	2	9397	T4 Baggage Airline Moves - T408	Legacy	2	0	2	New requirements agreed in 2009 as part of CIP Prioritisation to facilitate Airline Moves.
				9398	T4 Baggage Airline Moves - EBS	Legacy	4	9398	T4 Baggage Airline Moves - EBS	Legacy	4	0	4	New requirements agreed in 2009 as part of CIP Prioritisation to facilitate Airline Moves.
				9399	T4 Baggage Airline Moves - T407	Terminal Restoration & Modernisation	5	9399	T4 Baggage Airline Moves - T407	Terminal Restoration & Modernisation	5	0	5	New requirements agreed in 2009 as part of CIP Prioritisation to facilitate Airline Moves.
				9401	T4 Baggage Airline Moves - Main Baggage Hall	Legacy	2	9401	T4 Baggage Airline Moves - Main Baggage Hall	Legacy	2		2	New requirements agreed in 2009 as part of CIP Prioritisation to facilitate Airline Moves.
				9402	T4 Baggage Airline Moves - External Works	Legacy	2	9402	T4 Baggage Airline Moves - External Works	Legacy	2		2	New requirements agreed in 2009 as part of CIP Prioritisation to facilitate Airline Moves.
				9403	T4 Baggage Airline Moves - Satellites	Legacy	2	9403	T4 Baggage Airline Moves - Satellites	Legacy	2		2	New requirements agreed in 2009 as part of CIP Prioritisation to facilitate Airline Moves.

Heathrow Airport Limited CIP at Settlement				SCBP 2012			SCBP 2013				Significant scope changes SCBP 2013 compared with Q5 Settlement (See Footnote) (NB cost refs are to outturn price)			
CIP ID	BCT no.	Project Name (as at Q5 Settlement)	TOTAL	BCT no.	Project Name (as at SCBP 2012)	Delivery Programme at SCBP 2012	TOTAL	BCT no.	Project Name (as at SCBP 2013)	Delivery Programme at SCBP 2013		TOTAL	Comparison SCBP 2013 v SCBP 2012	Comparison SCBP 2013 v Settlement
				9516	T4 Baggage Works for Step 9	Legacy	50	9516	T4 Baggage Works for Step 9	Legacy	50	0	50	New requirements agreed in IBR6 to facilitate Airline Moves. Included scope from HBS VIVID Replacement Prog (BCT 615). Reclaim 1-7 ft out scope transferred from T4 Baggage Reclaim Hall Refurbishment (BCT 9645). ABF Phase 2 scope transferred to T2 Baggage. Transfer of scope and budget from Baggage Product Improvement (BCT 8818) for the design of the Arrival Baggage Tag Scanners solution. Further scope transfers to T4 Baggage Arrivals (BCT 10376), T4 ABF 1.75 (Phase 2) (BCT 10377), T4 BRH (1-7) Reclaim Refurb (BCT 10365), T4 ABF Building Works (BCT 10549) and T4 OCL RAP 7 + HBS (BCT 10378)
				9527	T5 DCV Bypass	Legacy	1	9527	T5 DCV Bypass	Legacy	1		1	Scope transfer from Baggage Product Improvements (BCT 8818)
				9805	T2 ICS	Terminal 2	72	9805	T2 ICS	Terminal 2	115	43	115	Specific project created for the provision of ICS scope included in T2A Building & Stands (BCT 8802) & T2B Phase 2 (BCT 4201). Scope transferred includes all ICS work except BCMS, lighting controls, fire alarms, PAVA, cabling and end devices. Subsequent scope transfers of ICS works from Control Tower Demolition (BCT 8888), T2 Leadership (BCT 8794) and MSCP 2 (BCT 3814). Later scope transfers to T2A Building & Stands (BCT 8802), T2B Phase 2 (BCT 4201) and alignment to IBR8.
				9853	T2A Baggage	Terminal 2	14	9853	T2A Baggage	Terminal 2	13	0	13	Scope originally derived from T2A Building (BCT 8802) and some scope subsequently transferred back to BCT 8802, T1 Baggage Prolongation Programme (BCT 9351) & T1 Transitions (BCT 10309). The remaining scope is for integration, learning and project management.
				10309	T1 Transitions	Terminal 2	53	10309	T2 Phase 1 Baggage	Terminal 2	101	48	101	Created to deliver scope associated with integrating T2A and T1 baggage systems ready for T2A opening. Scope transferred from T2A Baggage (BCT 9853) and Manual Handling Aids (BCT 4191). Further scope transfer to T1-T4 Tunnel Refurbishment (BCT 10442) and MOU+ Growth from T2A Building & Stands (BCT 8802). Realignment in accordance with IBR8. Inclusion of Q5+1 EAC (See footnote). Scope Transfers: from T1 Transitions for 2 additional TSA compliant baggage x-ray machines in the T1 Transfers system as a result of the MOU+ Growth, to T2 Logistics for Baggage Logistics scope, for T2A Bag Apps scope to T1 Transitions, to T1 Transitions for T1 Bag Apps scope for the T2A Arrivals Dual Offload solution. Reduction in risk allowance.
				10094	T3 HBS Replacement	Western Baggage Product	29	10094	T3 HBS Replacement	Western Baggage Product	29	0	29	Specific project derived from T3 Integrated Baggage project (BCT 3801) to deliver Standard II HBS for T3 in time for September 2012 DFT deadline. Additional scope transfer from Baggage Product Improvements (BCT 8818). EAC increased at Targets Confirmation.
				10663	T5 Bag Check	Western Baggage Product	1	10663	T5 Bag Check	Western Baggage Product	1	0	1	New project created with scope transferred from Baggage Product Improvements (BCT 8818).
				10658	T5 Baggage Western Campus IT	Western Baggage Product	6	10658	T5 Western Baggage Upgrade	Western Baggage Product	16	10	16	Additional scope identified since CIP 2011 for IT upgrade on the TS BHS mark II system architecture to reduce airline OPEX. Inclusion of Q5+1 EAC (See footnote) and increase to align with G3 gateway.
				10662	T5 Early Bag Store Capacity Increase	Western Baggage Product	2	10662	T5 Early Bag Store Capacity Increase	Western Baggage Product	7	5	7	Additional scope identified since CIP 2011 for enhancements to reduce bag misconnects. Incorporation of new scope included in the Q5+1 (2013/14) Heathrow Capital Plan Version 26.

All Costs in 07/08 Comparative Prices

Heathrow Airport Limited CIP at Settlement				SCBP 2012			SCBP 2013					Significant scope changes SCBP 2013 compared with Q5 Settlement (See Footnote) (NB cost refs are to outturn price)		
CIP ID	BCT no.	Project Name (as at Q5 Settlement)	TOTAL	BCT no.	Project Name (as at SCBP 2012)	Delivery Programme at SCBP 2012	TOTAL	BCT no.	Project Name (as at SCBP 2013)	Delivery Programme at SCBP 2013	TOTAL		Comparison SCBP 2013 v SCBP 2012	Comparison SCBP 2013 v Settlement
				10378	LHS OCL & RAP7 + HBS	Western Baggage Product	8	10378	LHS OCL & RAP7 + HBS	Western Baggage Product	7	-1	7	New project created with scope from T4 Baggage Works for Step 9 (BCT 9516) and T4 Baggage Arrivals (BCT 10376). Increase in cost to align with approved Construction Decision stage. Reductions due to negotiation of final account.
				10545	T4 APV HBS Replacement	Western Baggage Product	4	10545	T4 APV HBS Replacement	Western Baggage Product	4	0	4	New project created with scope transferred from Baggage Product Improvements (BCT 8818) and scope increased as approved by CIP Working Group.
				10606	T5 Can Store Relocation	Western Baggage Product	1	10606	T5 Can Store Relocation	Western Baggage Product	1	0	1	New project created with scope transferred from Baggage Product Improvements (BCT 8818)
				10683	WBP Intellectual Projects	Western Baggage Product	1	10683	WBP Intellectual Projects	Western Baggage Product	9	8	9	Scope Increase associated with the Western Baggage Product Intellectual Works (all costs up to and including Options Decision, G2, on all Western Baggage Product projects) that has been endorsed by the Change Board & CIP Working Group in February 2012. Transfer of OS+1 (2013/14) Heathrow Capital Plan Version 26 scope for Baggage Asset Replacement and IT from Intellectual Projects Delivery Scope (BCT 10793).
								9992	Heathrow Integrated Baggage System (HBS)	Western Baggage Product	8	8	8	Scope transfer from Systems and Technology (IT) programme. Scope transfer of Heathrow Integrated Baggage System from Intellectual Projects Delivery Scope (BCT 10793).
								10712	T3B Transfer Docks Relocation	Western Baggage Product	13	13	13	Transfer of T3B Transfer Docks Relocation project to Western Baggage Product from Programme Identification (BCT 10793). Transfer of scope included in the OS+1 (2013/14) Heathrow Capital Plan Version 26 transferred from Intellectual Projects Delivery scope (BCT 10793).
								10750	Enterprise Service Bus (ESB) Upgrade	Western Baggage Product	1	1	1	New project identified after SCBP 2012 for the Enterprise Service Bus (ESB) to enable the process of additional baggage messages across Heathrow that will be generated following the onset of the Terminal 5 Western Baggage Upgrade project.
								10827	Western Baggage Product Airline Occupancy	Western Baggage Product	0	0	0	Transfer of occupancy investigation works for Scenarios 9 & 11 optimised on T3B from OS design allowance (BCT 10972) in Programme Identification.
								10849	Standard 2 HBS Software Upgrades	Western Baggage Product	1	1	1	Scope transfer of HBS Software Upgrade scope from Intellectual projects delivery scope (BCT 10793) in Programme Identification.
First and last (car parking/CTA)														
H.NBU.06	4369	Landside CTA Redevt Strategy	23	4369	Landside CTA Redevt Strategy	Legacy		4369	Project deleted				-23	Scope transferred from T3 Additional Transfer Security Lanes - SQR (BCT 9223). Scope transferred to MSCP2 (BCT 3814) for road reconfiguration associated with delivering T2 car park.
H.R.10	7050	N1 Car Parking Decking Project	9	7050	N1 Car Parking Decking Project	Legacy	0	7050	N1 Car Parking Decking Project	Legacy	0		-9	Project deleted (scope no longer required)
				9640	MSCP4 Structural Relife	Capacity Optimisation	5	9640	MSCP4 Structural Relife	Capacity Optimisation	5	0	5	New requirement added at IBR6, agreed through CIP reprioritisation
				9301	Tunnels Refurbishment	Portfolio of Projects	16	9301	Tunnels Refurbishment	Portfolio of Projects	22	7	22	New requirement added at IBR6, agreed through CIP reprioritisation. Estimated cost reduced in September 2011. Some scope transferred from Cargo Tunnel Refurbishment (BCT 1832). Inclusion of OS+1 EAC (see footnote) and incorporation of new scope included in the OS+1 (2013/14) Heathrow Capital Plan Version 26 for Main CTA and Cargo Tunnel Refurbishment
								10805	Landside Roads	Portfolio of Projects	2	2	2	Incorporation of new scope included in the OS+1 (2013/14) Heathrow Capital Plan Version 26.

Heathrow Airport Limited CIP at Settlement				SCBP 2012			SCBP 2013							
CIP ID	BCT No.	Project Name (as at Q5 Settlement)	TOTAL	BCT No.	Project Name (as at SCBP 2012)	Delivery Programme at SCBP 2012	TOTAL	BCT No.	Project Name (as at SCBP 2013)	Delivery Programme at SCBP 2013	TOTAL	Comparison SCBP 2013 v SCBP 2012	Comparison SCBP 2013 v Settlement	Significant scope changes SCBP 2013 compared with Q5 Settlement (See Footnote) <small>(NB cost refs are to outturn price)</small>
Airfield (excl EA, WA and SA)														
H.A55.43	3358	AOS/ADB	3	3358	AOS/ADB	Legacy			3358 Project deleted				-3	Scope moved to Heathrow IT programme 2009.
H.A55.44	3356	ADAM	3	3356	ADAM	Legacy			3356 Project deleted				-3	Scope moved to Heathrow IT programme 2009.
H.A55.46	4185	Cargo Area RZ Road (T5-T4 Rout	7	4185	VIP Infrastructure	Portfolio of Projects	5	4185	VIP Infrastructure	Portfolio of Projects	5	0	-2	Scope reduction agreed at the CIP Working Group to off set a scope increase on the Airfield SEG5.
H.A55.52	7656	Additional Jetty Provision	10	7656	Additional Jetty provision	Legacy			7656 Project deleted				-10	Scope transferred to delivery projects (T3, T4, T5C and T2A&B). Further scope for additional jetties transferred to individual projects (BCT 4201, 8802, 9310 & 9844)
H.A55.08	1835	Taxiway/Cul-de-sac rebuilds	15	1835	Taxiway/Cul-de-sac rebuilds	Legacy			1835 Project deleted				-15	Q5 Scope transferred to a new project for delivery - Taxiway/CDS Rebuilds (Q5) (BCT 8857)
H.A55.06b	2809	A380 Taxiways around Pier 1	7	2809	A380 Taxiways around Pier 1	Legacy	7	2809	A380 Taxiways around Pier 1	Legacy	7		0	
H.A55.36	3353	Major Fire Appliance Replaceme	5	3353	Major Fire Appliance Replacement	Portfolio of Projects	4	3353	Major Fire Appliance Replacement	Portfolio of Projects	6	2	1	Inclusion of Q5+1 EAC (See footnote).
H.A55.39	3809	Overlay Runways	1	3809	Overlay Runways	Portfolio of Projects	3	3809	Runway Rehabilitations Project	Portfolio of Projects	31	28	30	Increase in EAC required for the concrete batcher, trials and AGL manufacture Incorporation of new scope included in the Q5+1 (2013/14) Heathrow Capital Plan Version 26 for Runway Overlays Northern & Southern and Q6 Runway Lighting. Transfer of scope for the Rapid Exit Taxiway from Heathrow Resilience (BCT 9501).
H.A55.20	1832	Cargo Tunnel Refurbishment	3	1832	Cargo Tunnel Refurbishment	Legacy			1832 Cargo Tunnel Refurbishment	Legacy			-3	Scope transferred to Tunnels Refurbishment (BCT 9301) (Safety Critical projects) under IBR6 reprioritisation
	4761	Runway radar FOD detection	2	4761	Runway radar FOD detection	Legacy	3	4761	Runway radar FOD detection	Legacy	3		1	Transfer of scope and budget from PIT project (BCT 4761) for delivery of FOD radar for both runways (continuation of Q4 works) and reduction relating to Q5 budget setting exercise in 2008.
H.A55.08n	4225	TTT - Northern Runway accesses	3	4225	TTT - Northern Runway accesses	Legacy			4225 Project deleted				-3	Entire scope transferred to Taxiway / CDS Rebuilds (Q5) (BCT 8857)
				7779	P23223 - T2A A/S Early Services Relocation	Legacy	4	7779	P23223 - T2A A/S Early Services Relocation	Legacy	4		4	Specific project derived from T2A Phase 1 (BCT 6100)
				8547	T4 A380 stands	Legacy	3	8547	T4 A380 stands	Legacy	3		3	Specific project derived from airfield scope of works transferred from A380 Stand/Gate Provision (BCT 2303)
				8857	Taxiway / CDS Rebuilds (Q5)	Portfolio of Projects	24	8857	Taxiway / CDS Rebuilds (Q5)	Portfolio of Projects	25	1	25	Scope for entire Taxiway/Cul-de-sac rebuilds (BCT 1835) and TTT - Northern Runway Accesses (BCT 4225) transferred to this project. Scope transferred for the runway delethalisation project from 2010 LPI Works (BCT 9738) & HAL Minor Projects (BCT 6527). Increase in estimated cost of taxiway Block 115 works.
				10406	Aviation Fuel Infrastructure	Capacity Optimisation	1	10406	Aviation Fuel Infrastructure	Capacity Optimisation	3	2	3	New scope identified since CIP 2011 covering the design stage of the project Inclusion of Q5+1 EAC (See footnote). Incorporation of new scope included in the Q5+1 (2013/14) Heathrow Capital Plan Version 26 and replanning scope to future years.
				10495	Stands Infrastructure	Capacity Optimisation	6	10495	Stands Infrastructure	Capacity Optimisation	4	-2	4	New scope identified since CIP 2011 covering additional Fixed Electrical Ground Power (FEGP) work to stands for A380 and B787 aircraft Incorporation of new scope included in the Q5+1 (2013/14) Heathrow Capital Plan Version 26 for additional PCA units for T3 stands. Transfer of scope to T3 Additional PCA Infrastructure Project (BCT 10857).

Heathrow Airport Limited CIP at Settlement				SCBP 2012			SCBP 2013				Significant scope changes SCBP 2013 compared with Q5 Settlement (See Footnote) (NB cost refs are to outturn price)			
CIP ID	BCT No.	Project Name (as at Q5 Settlement)	TOTAL	BCT No.	Project Name (as at SCBP 2012)	Delivery Programme at SCBP 2012	TOTAL	BCT No.	Project Name (as at SCBP 2013)	Delivery Programme at SCBP 2013		TOTAL	Comparison SCBP 2013 v SCBP 2012	Comparison SCBP 2013 v Settlement
				9501	Heathrow Resilience	Capacity Optimisation	21	9501	Heathrow Resilience	Capacity Optimisation	32	11	32	Transfer of PSDH funds for additional airfield infrastructure to provide Rapid Exit Taxiways (RET's) and Rapid Access Taxiways (RAT's) and associated works. Planning application for easterly alteration has been postponed until after the operational freedoms trials therefore some scope transferred from Q5 to Q5+1. Inclusion of Q5+1 EAC (See footnote). Project reprogrammed to complete in Q5+1.
				10442	T1-T4 Tunnel Refurbishment	Portfolio of Projects	3	10442	T1-T4 Tunnel Refurbishment	Portfolio of Projects	3	0	3	New project created with scope transfer from T1 Transition project (BCT 10309)
								10795	27L Runway Approach Lights	Portfolio of Projects	2	2	2	Incorporation of new scope included in the Q5+1 (2013/14) Heathrow Capital Plan Version 26.
								10797	AGL Control System	Portfolio of Projects	2	2	2	Incorporation of new scope included in the Q5+1 (2013/14) Heathrow Capital Plan Version 26.
								10804	Sierra Taxiway Code F to 27L	Capacity Optimisation	2	2	2	Incorporation of new scope included in the Q5+1 (2013/14) Heathrow Capital Plan Version 26.
								10857	T3 Additional PCA Infrastructure Project	Capacity Optimisation	5	5	5	New project created with a transfer of scope from Stands Infrastructure (BCT 10495) for the provision of pre-conditioned air.
Utilities														
H.U.01	3428	CO2 Strategy	4	3428	CO2 Strategy	Portfolio of Projects	3	3428	CO2 Strategy	Portfolio of Projects	3	0	-1	
				10668	CO2 Energy Demand Management	Portfolio of Projects	3	10668	CO2 Energy Demand Management	Portfolio of Projects	5	2	5	New scope identified since CIP 2011 consisting of HV metering, LV metering and small scale energy saving initiatives comprising, BMS, lighting upgrades, HVAC controls. Incorporation of new scope included in the Q5+1 (2013/14) Heathrow Capital Plan Version 26 for Enhanced energy meeting/measurement and Energy Demand Management.
H.U.06	7666	Energy Infrastructure	25	7666	Energy Infrastructure	Portfolio of Projects	41	7666	Energy Infrastructure	Portfolio of Projects	44	2	19	Scope transfer from Eastern Campus EIS (BCT 8828) for delivery of Eastern Campus Energy Centre scope as well as wider energy infrastructure requirements. Project rebaselined following Construction Decision in May 2010. Other minor scope transfers. Inclusion of Q5+1 EAC (See footnote).
				10681	HV West Intake Replacement	Portfolio of Projects	1	10681	HV West Intake Replacement	Portfolio of Projects	1	0	1	New scope identified since CIP 2011 for replacement of HV intake cables etc.
				10678	Q5 Portfolio of Projects Development	Portfolio of Projects	1	10678	Q5 Portfolio of Projects Development	Portfolio of Projects	4	3	4	Scope increase associated with the Portfolio of Projects Intellectual Works (all costs up to and including Options Decision, G2, on all Portfolio of Projects projects) that has been endorsed by the Change Board & CIP Working Group in February 2012. Incorporation of new scope included in the Q5+1 (2013/14) Heathrow Capital Plan Version 26 for Trolley Replacement for CTA.
								10736	Airside Vehicle Wash	Portfolio of Projects	1	1	1	New project created with a transfer of scope associated with the Airside Ancillary facilities for vehicle wash from T2B Apron (BCT 7209).
								10737	Airside Fuel Station	Portfolio of Projects	1	1	1	New project created with a transfer of scope associated with the fuelling facilities from T2B Apron (BCT 7209).
								10749	Airside Operational Building	Capacity Optimisation	8	8	8	New scope identified after SCBP 2012 as agreed at CIP Working Group in January 2013.
								10796	HAL Sweeper Tip Facility	Portfolio of Projects	2	2	2	Incorporation of new scope included in the Q5+1 (2013/14) Heathrow Capital Plan Version 26.
IT														
H.NBU.12	4241	IT Major Projects	12	4241				4241	Project deleted				-12	Scope transferred to Heathrow IT programme at CIP 2009
H.NBU.10	3606	Telecoms Programme	1	3606				3606	Project deleted				-1	

Heathrow Airport Limited CIP at Settlement				SCBP 2012			SCBP 2013							
CIP ID	BCT No.	Project Name (as at Q5 Settlement)	TOTAL	BCT No.	Project Name (as at SCBP 2012)	Delivery Programme at SCBP 2012	TOTAL	BCT No.	Project Name (as at SCBP 2013)	Delivery Programme at SCBP 2013	TOTAL	Comparison SCBP 2013 v SCBP 2012	Comparison SCBP 2013 v Settlement	Significant scope changes SCBP 2013 compared with Q5 Settlement (See Footnote) <small>(NB cost refs are to outturn price)</small>
Retail														
H.R.08	7049	JCD Media Sites	3	7049	JCD Media Sites	Terminal Restoration & Modernisation	3	7049	JCD Media Sites	Terminal Restoration & Modernisation	3	0	0	
				10667	MSCP 909 Refurbishment (BA Car Park)	Portfolio of Projects		10667	Project deleted					New scope identified since CIP 2011 covering works being undertaken to address issues regarding condition of the structure of BA staff car parks. Project transferred to Minor Works (BCT 10232).
H.R.09	7047	HEX Media Site	0	7047	HEX Media Sites	Legacy	0	7047	HEX Media Sites	Legacy	0		-1	
	5395	Staff CP Swipe System	2	5395	Staff CP Swipe System	Legacy		5395	Project deleted					Scope deleted under CIP reprioritisation IBR6
				10295	Retail Concessions	Terminal Restoration & Modernisation	1	10295	Retail Concessions	Terminal Restoration & Modernisation	3	2	3	Scope transferred from T3 IDL (BCT 9653) and Minor Projects (BCT 10232). Incorporation of new scope included in the Q5+1 (2013/14) Heathrow Capital Plan Version 26.
				10296	Retail Services	Terminal Restoration & Modernisation	1	10296	Retail Services	Terminal Restoration & Modernisation	3	3	3	Incorporation of new scope for retail services minor works included in the Q5+1 (2013/14) Heathrow Capital Plan Version 26. Transfer of scope from Minor Projects (BCT 10232) including One Network car park.
				9778	Retail 2010 (CWF) Concessions	Legacy	1	9778	Retail 2010 (CWF) Concessions	Legacy	1		1	Transfer of budget from single Minors project to individual BCT projects for delivery of scope developed at IBR6
				10666	Wayfinding Strategy Initiative	Terminal Restoration & Modernisation	3	10666	Wayfinding Strategy Initiative	Terminal Restoration & Modernisation	9	6	9	New wayfinding scope introduced February 2011 to facilitate the speedy, independent and effective movement of passengers through Terminals. Incorporation of new scope included in the Q5+1 (2013/14) Heathrow Capital Plan Version 26 for Dynamic Wayfinding.
				10669	Rolex Clocks Project	Terminal Restoration & Modernisation	1	10669	Rolex Clocks Project	Terminal Restoration & Modernisation	1	0	1	
				10692	Q5 TRM Intellectual Works	Terminal Restoration & Modernisation	1	10692	Q5 TRM Intellectual Works	Terminal Restoration & Modernisation	6	6	6	Scope increase associated with the Terminal Restoration & Modernisation Intellectual Works (all costs up to and including Options Decision, G2, on all Terminal Restoration & Modernisation projects) that has been endorsed by the Change Board & CIP Working Group in February 2012. Incorporation of new scope included in the Q5+1 (2013/14) Heathrow Capital Plan Version 26 for E Business Development, Web & Mobile platforms, Real Time Sales Data and T5 Gate Luxury in preparation for transfer to delivery projects.
Security														
H.NBU.14	4183	Managed Campus - Sec. Projects	14	4183	Managed Campus - Sec Projects	Legacy		4183	Project deleted				-14	Scope transferred to BCTs 9105, 9109 and 9213 for delivery of specific scope requirements
H.NBU.13	4182	MC - Enhanced Sec Prog Impl	10	4182	MC - Enhanced Sec Prog Impl	Legacy		4182	Project deleted				-10	Budget transferred to Security Projects (BCT 9213)
H.NBU.18	5056	Physical Perimeter Security	6	5056	Physical Perimeter Security	Legacy	4	5056	Physical Perimeter Security	Legacy	4		-2	Reduction relating to Q5 budget setting exercise in 2008 and further rebaselining under IBR6
	5076	ID Centre Futures	1	5076	ID Centre Futures	Legacy		5076	ID Centre Futures	Legacy			-1	Scope deleted under CIP reprioritisation IBR6
H.NBU.19	8451	Remote Goods Screening	5	8451	Remote Goods Screening	Legacy		8451	Project deleted				-5	Scope transferred under CIP reprioritisation IBR6 and project deleted. Scope transferred to Security Projects (BCT 9213).
H.NBU.20	8452	Control Post Programme	28	8452	Control Post Programme	Portfolio of Projects	29	8452	Control Post Programme	Portfolio of Projects	29	0	1	Scope transferred from T2B Phase 2 (BCT 4201) for the provision of two temporary construction control posts to ease construction traffic congestion.
				8801	CP5	Legacy	6	8801	CP5	Legacy	6	0	6	Specific project derived from T2A Early Stage Cost (BCT 6100). Additional scope transferred from T1 Site Welfare & Site Office Facilities (Logistics) (BCT 2164) and Other CTA Enabling Works (BCT 8803) for delivery of works required at CP5

Heathrow Airport Limited CIP at Settlement				SCBP 2012			SCBP 2013							
CIP ID	BCT No.	Project Name (as at Q5 Settlement)	TOTAL	BCT No.	Project Name (as at SCBP 2012)	Delivery Programme at SCBP 2012	TOTAL	BCT No.	Project Name (as at SCBP 2013)	Delivery Programme at SCBP 2013	TOTAL	Comparison SCBP 2013 v SCBP 2012	Comparison SCBP 2013 v Settlement	Significant scope changes SCBP 2013 compared with Q5 Settlement (See Footnote) <small>(NB cost refs are to outturn price)</small>
				9105	New Model Line (formerly ATRS)	Terminal Restoration & Modernisation	5	9105	New Model Line (formerly ATRS)	Terminal Restoration & Modernisation	27	22	27	Scope transferred from Managed Campus Security Projects (BCT 4183) Incorporation of new scope included in the Q5+1 (2013/14) Heathrow Capital Plan Version 26. Scope Increase to enable the full roll-out of Enhanced Security Lanes in Terminals 3 and 4.
				9109	Fixed POST Reduction	Legacy	2	9109	Fixed POST Reduction	Legacy	2		2	Scope transferred from Managed Campus Sec Projects (BCT 4183)
				9303	Wellington Road Security Search	Legacy	1	9303	Wellington Road Security Search	Legacy	1	0	1	
				9843	Low Cost Security Projects	Portfolio of Projects	6	9843	Low Cost Security Projects	Portfolio of Projects	7	1	7	Scope transferred from the Security Projects (BCT 9213) to Low Cost Security Projects for delivery by the Local Projects Teams. Incorporation of new scope included in the Q5+1 (2013/14) Heathrow Capital Plan Version 26.
								10841	T5 Connections Security	Capacity Optimisation	1	1	1	Transfer of scope to form new project for Phase 2 works from T5 Connections & Capacity (BCT 9575).
								10847	Premium Security Fast Track	Terminal Restoration & Modernisation	10	10	10	New scope identified after SCBP 2012. Incorporation of new scope included in the Q5+1 (2013/14) Heathrow Capital Plan Version 26.
								10850	Liquids Profiling	Terminal Restoration & Modernisation	0	0	0	New project identified after SCBP 2012.
HAL Minor Projects														
	6527	CvF (Incl. Retail & Property)/ HAL Minor Projects	137	6527	HAL Minor Projects (Incl Retail & Property)	Terminal Restoration & Modernisation	33	6527	HAL Minor Projects (Incl Retail & Property)	Terminal Restoration & Modernisation	33	0	-104	2009 scope transferred to delivery projects (BCTs 9106, 9107, 9108); 2010 scope transferred to BCT 9738 and 10232. In 2011, transfer of scope to new 2011 - 2012 Minor project (BCT 10232); 2010 LPI Works (BCT 9738) to enable the rephasing of the minor works portfolio and delivery of scope remaining in Q5. Transfer of scope for the Delethalisation project to Taxiway / CDS Rebuilds (Q5) (BCT 8857)
		cvf Clean, working, friendly	13	cvf				cvf	Project deleted				-13	Scope transferred to delivery projects (BCTs 9106, 9107, 9108); 2010 scope transferred to 2010 LPI Works (BCT 9738)
				6391	T1 Re-flooring	Legacy	1	6391	T1 Re-flooring	Legacy	1		1	Minor scope transfers from Pier 4 Seg (BCT 3884), Pier 3 Seg (BCT 6645) and CvF. Rebased in accordance with IBR6.
				7701	T3 PR10 AHU Replace Ph2	Legacy	1	7701	T3 PR10 AHU Replace Ph2	Legacy	1		1	New scope identified at CIP 2009 for the replacement of air handling unit in T3.
				8376	Northern Perimeter Congestion	Legacy	1	8376	Northern Perimeter Congestion	Legacy	1		1	
				8541	T3 Escalator replacement	Legacy	1	8541	T3 Escalator replacement	Legacy	1		1	
				9106	LPI1 - Inviron	Legacy	8	9106	LPI1 - Inviron	Legacy	8		8	Minor projects allocated to Local Projects Integrator for delivery. 2009 scope of works transferred from BCT 6527, rebaselining in accordance with IBR6 and scope transfers to LPI Projects (BCT 9107 & 9108), HAL Minor Projects (BCT 6527) and T4 Airbridge Replacement (BCT 9844).
				9107	LPI2 - Kier	Legacy	10	9107	LPI2 - Kier	Legacy	10		10	Minor projects allocated to Local Projects Integrator for delivery. 2009 scope of works transferred from HAL Minor Projects (BCT 6527) and LPI1 - Inviron (BCT 9106).
				9108	LPI3 - ROK	Legacy	9	9108	LPI3 - ROK	Legacy	9		9	Minor projects allocated to Local Projects Integrator for delivery. 2009 scope of works transferred from HAL Minor Projects (BCT 6527) and LPI1 - Inviron (BCT 9106). Scope transferred to Minor Project's (BCT 6527) & 2011 - 2012 Minor Projects (BCT 10323)

All Costs in 07/08 Comparative Prices

Heathrow Airport Limited CIP at Settlement				SCBP 2012			SCBP 2013							
CIP ID	BCT No.	Project Name (as at Q5 Settlement)	TOTAL	BCT No.	Project Name (as at SCBP 2012)	Delivery Programme at SCBP 2012	TOTAL	BCT No.	Project Name (as at SCBP 2013)	Delivery Programme at SCBP 2013	TOTAL	Comparison SCBP 2013 v SCBP 2012	Comparison SCBP 2013 v Settlement	Significant scope changes SCBP 2013 compared with Q5 Settlement (See Footnote) <small>(NB cost refs are to outturn price)</small>
				9738	2010 LPI Works	Terminal Restoration & Modernisation	19	9738	2010 LPI Works	Terminal Restoration & Modernisation	19	0	19	2010 scope of works transferred from BCT 6527. Transfer of scope for the runway dealthalisation project to Taxiway / CDS Rebuilds (BCT 8857). Transfer of HVAC scope from D'Albiac Tenant Fit Out (BCT 7233). See also comments for HAL Minor Projects (BCT 6527). Scope transferred to T4 Airbridge Replacement (BCT 9844) and further scope transferred to 2011 - 2012 Minor Projects (BCT 10232) to assist in closing this project.
				9720	Remove Fowles Yard	Portfolio of Projects	2	9720	Remove Fowles Yard	Portfolio of Projects	2	0	2	New scope identified at CIP 2010 to comply with T5 planning requirements.
				9721	Landside Road Safety Compliance	Portfolio of Projects	2	9721	Landside Road Safety Compliance	Portfolio of Projects	2	0	2	New scope identified at CIP 2010 to modify airport road signage to improve safety in accordance with the CIP Prioritisation in December 2009.
				10232	2011 - 2012 Minor Projects	Terminal Restoration & Modernisation	54	10232	2011 - 2012 Minor Projects	Terminal Restoration & Modernisation	57	3	57	Project for Minors work for 2011/12 transferred from HAL Minor Projects (BCT 6527). Additional scope relating to Road Scanning, Road Surface Enhancements and Pedestrian Crossings at agreed location around the Airport. Scope transfers from various projects including the following: Heathrow Terminal T5C (BCT 5221), 2010 LPI Works (BCT 9738) and Heathrow Resilience (BCT 9501). Scope increase for the delivery of the complete SEG5. Transfer of strip out works and other items to T3 IDL Transformation from (BCT 9653). Transfer of scope of T4 VAT expansion from Retail Concessions (BCT 10295). Transfer of scope from T3 Check-In Enhancements (BCT 9654) for the removal of the zone E and zone F staircases, the centralisation of the cul de sac escalators and associated concourse and departures level works. Scope increase to deliver a permanent children's play area and family zone in T3.
								10799	Property Asset Replacement & Maintenance	Portfolio of Projects	1	1	1	Incorporation of new scope included in the Q5+1 (2013/14) Heathrow Capital Plan Version 26.
								10824	Passenger Toilets	Terminal Restoration & Modernisation	2	2	2	Incorporation of new scope included in the Q5+1 (2013/14) Heathrow Capital Plan Version 26.
								10825	Terminal Ambience	Terminal Restoration & Modernisation	2	2	2	New scope identified after SCBP 2012. Incorporation of new scope included in the Q5+1 (2013/14) Heathrow Capital Plan Version 26.
								10826	Asset Replacement	Terminal Restoration & Modernisation	24	24	24	New scope identified after SCBP 2012. Incorporation of new scope included in the Q5+1 (2013/14) Heathrow Capital Plan Version 26.
								10833	Asset Replacement - Property	Terminal Restoration & Modernisation	2	2	2	Transfer of scope from Property Asset Replacement (BCT 10799). Minors project will deliver T3 SVV common areas and car park 1188.
								10851	Waste Management	Portfolio of Projects	1	1	1	New scope identified after SCBP 2012. Incorporation of new scope included in the Q5+1 (2013/14) Heathrow Capital Plan Version 26.
								10792	Q6 Design Allowance	Q6 Portfolio	17	17	17	Incorporation of new Programme Identification scope included in the Q5+1 (2013/14) Heathrow Capital Plan Version 26 into Programme Identification programme. Transfer of occupancy investigation works for Scenarios 9 & 11 optimised on T2 to T2 Leadership (BCT 8794) in the T2 Programme and transfer of occupancy investigation works for Scenarios 9 & 11 optimised on T3IB to Western Baggage Product Airline Occupancy (BCT 10827) in the Western Baggage Product programme.

Heathrow Airport Limited CIP at Settlement				SCBP 2012			SCBP 2013							
CIP ID	BCT no.	Project Name (as at Q5 Settlement)	TOTAL	BCT no.	Project Name (as at SCBP 2012)	Delivery Programme at SCBP 2012	TOTAL	BCT no.	Project Name (as at SCBP 2013)	Delivery Programme at SCBP 2013	TOTAL	Comparison SCBP 2013 v SCBP 2012	Comparison SCBP 2013 v Settlement	Significant scope changes SCBP 2013 compared with Q5 Settlement (See Footnote) <small>(NB cost refs are to outturn price)</small>
									10793 Project deleted					Incorporation of intellectual (work up to and including gateway G2) project delivery scope included in the Q5+1 (2013/14) Heathrow Capital Plan Version 26 into Programme Identification programme in preparation for transfer to IT, Terminal Restoration & Modernisation, Portfolio of Projects, Capacity Optimisation and Western Baggage Product following endorsement from CIP Working Group.
					10807 HVAC Compliance	Terminal Restoration & Modernisation	2			Terminal Restoration & Modernisation	2	2	2	Incorporation of new scope included in the Q5+1 (2013/14) Heathrow Capital Plan Version 26.
					10809 PRM Rooms	Terminal Restoration & Modernisation	1			Terminal Restoration & Modernisation	1	1	1	Incorporation of new scope included in the Q5+1 (2013/14) Heathrow Capital Plan Version 26.
					10828 Princes Ski Club	Portfolio of Projects	3			Portfolio of Projects	3	3	3	New scope identified after SCBP 2012 for the purchase of Princes Ski Club.
					10829 TATPI Intellectual Project	Terminal Restoration & Modernisation	3			Terminal Restoration & Modernisation	3	3	3	New scope identified after SCBP 2012 for intellectual works (up to and including gateway G2) for Technology and the Passenger Journey initiative. Incorporation of new scope included in the Q5+1 (2013/14) Heathrow Capital Plan Version 26 for work to self boarding. Transfer of intellectual works from Capacity Optimisation Intellectual project (BCT 10708).
					10834 Replacement of VIP Booking System	Terminal Restoration & Modernisation	0			Terminal Restoration & Modernisation	0	0	0	New scope identified after SCBP 2012.
					10839 Summer 2012 - Retained Assets	Legacy	7			Legacy	7	7	7	New scope identified after SCBP 2012 for assets constructed for the Olympics and retained for further use.
Management adjustments														
				9999	Capital Programme Reserve	Legacy	15	9999	Capital Programme Reserve	Legacy	15		15	Reserve held for central costs prior to allocation to individual projects
					Management Adjustment (challenge)				Adjustments to Mngt reserve					
					Adjustments to Mngt reserve									

Footnote

The figures shown for SCBP 2013 include the Q5 extension year (Q5+1) and therefore cover a 6 year period. However, the Q5 Settlement and SCBP 2012 figures are based on the original Q5 period (5 years). Where the inclusion of Q5+1 has been a factor in the movement of a project's EAC a note to this effect has been included in the commentary.

Appendix L: Triggers

Campus and Projects	Trigger Date	Trigger Forecast or Actual Finish Date	CAA Endorsed as Complete	Trigger Rebate in Q5 to Mar 14 (07/08 Prices)			Rebate to date (07/08 Prices)	
				Monthly Trigger Rebate (£m)	Delay (months)	Total Trigger Rebate (£m)	Delay (months)	Total Trigger Rebate (£m)
Legacy								
1 T4 - Completion of Baggage Sorter (Replacement) [T]	31-Jan-09	10-Jul-09	Y	0.10	6	0.60	6	0.6
2 T1 - Completion of BMI Nose Building Facility [T]	31-Jan-09	31-Oct-08	Y	0.10				
3 Completion of T2B Phase 1 Stage 1 for OR [T]	31-Jan-10	27-Nov-09	Y	0.50				
4 T3 - Completion of pier 5 refurbishment [T]	31-Jul-09	08-May-09	Y	0.10				
5 T3 pier 7 Refurbishment Complete [T]	31-Aug-09	22-Oct-09	Y	0.10	2	0.20	2	0.2
6 T3 Completion of Check In & Security Search Refurbishment [T]	31-Jul-11	24-May-11	Y	0.10				
7 T4 - New CIP(stand 407) Lounge Access for Fit-out [T]	28-Feb-09	01-Dec-08	Y	0.10				
8 Completion of T4-T1 baggage tunnel refurbishment [T]	31-Jan-09	27-Mar-09	Y	0.10	2	0.20	2	0.2
9 T4 - Completion of 3rd jetties on each 2 A380 stands [T]	31-May-09	09-Apr-09	Y	0.10				
10 T4 Check-in Phase completion of South West bank of check in desks [T] - 19 no.	30-Jun-09	31-Aug-09	Y	0.10	2	0.20	2	0.2
11 T4 - Completion of North East bank of Check in desks [T]	31-Jan-10	01-Oct-09	Y	0.10				
Total Legacy				0.10	12	1.20	12	1.20
Terminal 2								
12 MSCP Sufficiently progressed for Ops trials to commence [T]	31-Mar-13	30-Aug-13		0.48	5	2.40		
13 T2 Demolition Complete & T2A Substructure Complete [T]	31-Mar-11	31-Mar-11	Y	2.78	0	-		
14 Phase 1 Building Weatheright [T]	29-Feb-12	24-Feb-12	Y	3.03				
15 T2A Sufficient Progressed for Ops Trials to Commence [T]	30-Nov-12	31-Oct-13		1.22	11	13.42	4	4.88
16 T2B Completion of T2B Midfield Pier for OR [T]	30-Nov-12	29-Nov-13		0.67	12	8.04	4	2.68
17 T2B Completion of Passenger Connectivity to T2B Midfield Pier [T]	30-Nov-12	29-Nov-13		0.31	12	3.72	4	1.24
18 Completion of the Outer Pier North (now T2B South)	31-Jan-12	29-Nov-13		0.49	22	10.78	14	6.86
Total Terminal 2				0.62	62	38.36	26	15.66
Western Baggage Product								
19 PT5 TBS Completion Confirmation (Baggage Connectivity - Tsfer Tunnel T5-T3 [T]	30-Nov-11	30-Nov-11	Y	0.79	0	-		
20 T3IB - Completion of the T3 Integrated Baggage System [T]	31-Mar-12	15-Sep-14		1.19	24	28.56	12	14.28
21 Completion Confirmation (Baggage Connectivity - Tsfer Tunnel T3-T1 [T]	30-Jun-12	31-Mar-14		0.41	21	8.61	9	3.69
Total Western Baggage Product				0.83	45	37.17	21	17.97
Terminal Restoration & Modernisation								
22 T3 Completion Immigration: Landside Departures & Baggage Refurbishment [T]	31-Mar-11	31-Mar-11	Y	0.16	0	-		
23 T5C Completion of Satellite [T]	31-May-11	31-May-11	Y	1.37	0	-		
24 T5C Nodes & link bridges stands 563/564 complete	31-May-11	31-May-11	Y	0.10	0	-		
Total Terminal Restoration & Modernisation				-	-	-	-	-
Capacity Optimisation								
25 T5TTS Enhancements - Completion of Walkways and Platform Enhancements [T]	31-May-11	31-Mar-14		0.10	34	3.40	22	2.20
Total Capacity Optimisation				0.10	34	3.40	22	2.20
Portfolio of Projects								
26 Maint Area Enabling Wks - Completion of Diversion of East Church Road [T]	31-Mar-10	28-Mar-14		0.17	48	8.16	36	6.12
27 Restore Southern Runway to CAT3 [T]	31-Dec-13	30-Dec-13		0.10				
Total Portfolio of Projects				0.17	48	8.16	36	6.12
Total							117 mths	£43.15m

Appendix M: Q5+1 Spend (Version 26)

Q5+1 (2013/14) Heathrow capital plan based on 2007/2008 £735m inflated to 2011/2012 price base £879m

CS Ref	Concept Solution Title	Stakeholder Fora	Delivery Programme	Concept Status	Q5+1 £m	Q6 £m
Roll	T2A Building	EC	T2	P	121	10
Roll	EC Logistics & Leadership	EC	T2	P	63	14
Roll	MSCP East Phase 1	EC	T2	P	24	0
Roll	T2B Phase 2	EC	T2	P	96	42
Roll	Eastern Campus ICS	EC	T2	P	25	3
Roll	T2A Baggage	EC	T2	P	12	0
Roll	Eastern Campus Apron	EC	T2	P	20	0
Roll	Energy Infrastructure	A&EA	POP	P	3	0
Roll	Eastern Maintenance Base	A&EA	POP	P	10	0
Roll	Major Fire Appliance Replacement	A&EA	POP	P	3	0
Roll	T3IB	WBP	WBP	P	78	51
Roll	Heathrow Resilience	A&EA	CO	P	13**	0
NR 3139	T4 ABF 1.75 Phase 2	WBP	CO	P	2.7	0
NR 3206	T3 Pier 5 A380 gaterooms 340	T3	CO	P	8.5	7
NR 3144	Stands Infrastructure - FEGP Upgrade for 787	A&EA	CO	P	2.0	0
NR 3019	T5 - TTS Capacity	T5	CO	P	19.0	2
NR 1936	(A) Terminal 3 - Structure	T3	POP	P	5.0	3.5
NR 3138	T5 Early Bag Store Capacity Increase	WBP	WBP	P	7.5	5.0
NR 3159	T5 Baggage Western Campus IT Upgrade	WBP	WBP	P	2.4	0
NR 3150	MSCP2 Phase 2 Enabling	EC	T2	P	14	0
NR 3164	T2B Phase 1 refit	EC	T2	P	4.5	1
NR 3141	Code F 3rd Bridges T5C & T2B	EC/T5	T2/TRM	P	0.6	0
NR 3160	T3 Check in Zone A and B Porches	T3	TRM	P	1.5	0
3113	27L Runway Approach Lights	A&EA	POP	P	1.5	0
3037	Runway Overlays Northern & Southern & Q6 Runway Lighting	A&EA	POP	P	20.0	0
3110	AGL Control System	A&EA	POP	P	3.0	5.0
3570	HAL Sweeper Tip Facility	A&EA	POP	P	2.0	2.0
3028	Q6 Pollution Control Systems	A&EA	POP	P	5.0	0
2030	Property Asset Replacement & Maintenance	A&EA	POP	P	4.0	0
3103	Enhanced energy meeting/measurement	A&EA	POP	P	1	0
3540	Energy Demand Management	A&EA	POP	P	1	0
3148	T3 Check-in Enhancements Phase 2	T3	TRM	P	3.5	0
2140	Retail Services Minor Works	TBA	TRM	P	2	0
3021	MSCP2 Phase 2 Full Build	EC	PI	P	18.0	8.0
3044	Additional Aviation Fuel Infrastructure	A&EA	CO	P	6.0	13
2055	Loading bay enhancements T3 & T4	T3/T4	CO	P	1.5	3.5
3002	T4 Baggage Reclaim Hall Capacity	T4/WBP	CO	P	8	4
3152	Additional Domestic & Introduction of CTA Capacity in T5A	T5	CO	P	2	0
3067	Baggage Combined Control rooms	WBP	CO	P	6	3.0
3053	Sierra taxiway Code F to 27L	A&EA	CO	P	2	0
TBA	(A) Landside Roads	A&EA	POP	P	3.0	0
TBA	Core Electrical Distribution Upgrades	A&EA	POP	P	8.0	0
TBA	Remaining T4 Airbridge Asset Replacement	T4	TRM	P	5	0
TBA	HVAC Compliance	TBA	TRM	P	2	0
TBA	T5 Landside Lifts	T5	TRM	P	0.5	0
TBA	PRM Rooms	TBA	TRM	P	2	0
TBA	T5 Reject Facility - Sorter to Arrivals	WBP	WBP	P	4	0
TBA	T5B MAR's ing Code F's	T5	CO	P	2	0
TBA	Additional Heathrow Resilience Works	A&EA	CO	P	10**	0
TBA	T3 Pier 5 Redevelopment	T3	CO	P	7	0
TBA	Pier 5 Phase 1 Gate Room MAID Doors	T3	CO	P	0.6	0
Sub Total					643	177

 Items being discussed in alternative fora

** Funded from PSDH not included in total & adjustment made to bottom line

I = Concept Solutions endorsed for Intellectual works - i.e. Initially funding will only be provided to Options Decision (G2) 1% - 3% of the total concept value

P = Concept Solutions endorsed to Proceed into standard process

Excludes on-going Winter Resilience & Compass Centre East Block Refurbishment work, currently being funded outside of the Regulated Asset Base

Values shown in the Q6 Columns above are initial Q6 commitments

Values shown exclude IBRS Impacts

Q5+1 (2013/14) Heathrow capital plan based on 2007/2008 £735m inflated to 2011/2012 price base £879m

CS Ref	Pax Experience	Stakeholder Fora	Delivery Programme	Concept Status	Q5+1 £m	Q6 £m
TBA	In order to complete T2 successfully there are some known changes that will need to be funded. These will be funded from the CIP via the CIPWG process. These known changes need to be a priority alongside the I's in this list.	CIPWG	T2	I	TBA	TBA
Q6 Des	Q6 Design Allowance	CIPWG	PI	I	25	0
3100	T2 Pier 6 Connector	CIPWG	PI	I	3	0
2520	Innovation	IT	SYS/PI	I	1	0
2500	IT Telecoms Infrastructure	IT	SYS/PI	I	21.7	18.2
2206	End of life Commercial Systems Replacement	IT	SYS/PI	I	4.3	0
2512	Maximo Replacement	IT	SYS/PI	I	4.1	0
2557	Document Management Collaboration	IT	SYS/PI	I	2.4	0
6000	Protecting & Enhancing Finance Capability	IT	SYS/PI	I	1.7	0
2558	Procurement System Enhancements	IT	SYS/PI	I	1.3	0
3999	IT Capital Management	IT	SYS/PI	I	1.2	0
2553	My Airport refresh & enhancements	IT	SYS/PI	I	1.1	0
2555	Volunteer and Reservists System	IT	SYS/PI	I	0.9	0
2556	HR Enhancements	IT	SYS/PI	I	1.1	0
2550	BSC Case Management	IT	SYS/PI	I	1.1	0
2552	BSC Telephony Integration	IT	SYS/PI	I	0.1	0
3540	Fleet Data Tracking	IT	SYS/PI	I	0.1	0
2551	BSC Document Management	IT	SYS/PI	I	0.5	0
2200	E Business Development	IT	TRM/PI	I	2	0
2150	Ensure Web and Mobile platforms keep pace technically with passenger informational needs	IT	TRM/PI	I	3	0
2057	Real Time Sales Data	IT	TRM/PI	I	2	0
2130	Commercial IT & Telecoms Offerings	IT	TRM/PI	I	1.5	0
3101	Trolley Replacement for CTA (T1,T2,CTO,T3)	A&EA	POP/PI	I	3.8	0
3035	Main CTA Tunnel Refurb	A&EA	POP/PI	I	9.0	70.7
3051	HAL waste infrastructure	A&EA	POP/PI	I	1.5	0
3106	Renewable Energy Generation	A&EA	POP/PI	I	0.3	0
3124	Cargo Tunnel Refurb	A&EA	POP/PI	I	6.0	47.5
3554	AQ monitor replacement	A&EA	POP/PI	I	0.3	0
4804	Crossrail - assurance & protection	SA	SA/PI	I	1.6	0
4801	Surface Access Fund (High Speed Rail)	SA	SA/PI	I	2.0	0
2401	HEX Asset Replacement	SA	SA/PI	I	6	0
3147	T3 Arrivals Upgrades	T3	TRM/PI	I	9	0
3115	PRM Lifts Airside T3, T4, T1 and T5	T1/T3/T4/T5	TRM/PI	I	6	0
2111	Premium Security (Fast Track)	TBA	TRM/PI	I	11	0
2061	Retail concessions minor works	TBA	TRM/PI	I	2	0
2056	T4 General Retail Improvements	T4	TRM/PI	I	1.5	0
2051	T5 Gate luxury	T5	TRM/PI	I	4.85	3.7
2122	Dynamic Wayfinding	TBA	TRM/PI	I	4	0
2112	Expansion of ACS/ACS+	TBA	TRM/PI	I	5	0
3156	New Model Line	TBA	TRM/PI	I	16	0
3078	Self Bag Drop	TBA	CO/PI	I	10	0
2403	Self Boarding	TBA	CO/PI	I	3	0
2502	Real Time Heathrow	TBA	CO/PI	I	6	5
TBA	Additional PCA Units for T3 Stands	T3	CO/PI	I	5	0
TBA	Low Value Security Projects	A&EA	POP/PI	I	1.5	0
TBA	Baggage Asset Replacement	WBP	WBP/PI	I	4.0	0
TBA	Baggage IT Asset Replacement	WBP	WBP/PI	I	5.0	0
TBA	W/B Provision of Direct Airline Transfer Input Capability	WBP	WBP/PI	I	12	0
TBA	Asset Replacements All Areas (AKA Minors)	A&EA	TRM/PI	I	25	0
TBA	Terminal Ambience	TBA	TRM/PI	I	2.5	0
TBA	Passenger Toilets	TBA	TRM/PI	I	2.5	0
Sub Total					245	145
Cumulative Sub Total					889	322

Q6 Design Allowance - Top 10 Areas of Potential Focus

T2 Baggage System & T2 Phase 2 (as per Q5 CIP)	Terminal 3 Passenger Improvements
Code F Capability	Standard 3 HBS Upgrades
Asset Replacement	Terminal 5 Transfer Security Operation Improvement
Terminal 1 Future	Opportunities
Airfield Resilience	Impacts of BMI Divestment

Items being discussed in alternative fora

** Funded from PSDH not included in total & adjustment made to bottom line

I = Concept Solutions endorsed for Intellectual works - i.e. Initially funding will only be provided to Options Decision (G2) 1% - 3% of the total concept value

P = Concept Solutions endorsed to Proceed into standard process

Excludes on-going Winter Resilience & Compass Centre East Block Refurbishment work, currently being funded outside of the Regulated Asset Base

Values shown in the Q6 Columns above are initial Q6 commitments

Values shown exclude IBR8 Impacts