Strategic Capital
Business Plan

June 2020

Heathrow
Making every journey better

Contents

Introduction and context

1   Foreword

2019 marked the end of a transformational decade for Heathrow as we welcomed a record 80.9 million passengers. Our traffic grew by nearly 25% in the past ten years and we significantly enhanced our passenger experience despite being severely capacity-constrained. Over £12 billion of private money made all this possible. We invested in our colleagues, in better facilities, better processes and resilience. We have also taken a leading role in tackling one of the biggest challenges of our times: climate change. All of this paid off for our passengers and has earned us a place among the best-rated airports in the world today. Zooming into 2019, we continued progressing on all four strategic priorities underpinning our vision to give passengers the best airport service in the world: making Heathrow a great place to work, transforming customer service, beating the business plan and sustainable growth.

However, the recent catastrophic impacts of COVID-19 across the world have been swift and significant. The tragic human cost alone is something we've not seen in generations, and the lockdown of economies across the world is something that no one could have imagined possible.

Our industry is struggling. It's hard to imagine that 2019 was our busiest year ever with 81 million passengers. Now only six months into 2020, we're operating from a single runway, we're consolidating our operations into only two terminals and our daily passenger numbers have shrunk to the thousands. This is a major crisis for global aviation, and no one can be sure of how fast we will recover from it.

Heathrow is a business that has safety and sound future planning wired into its DNA. Whilst we couldn't have predicted this situation, we have been taking steps over the past decade to beef up the financial resilience of our business should the unexpected happen. Over the last decade, Heathrow has transformed its service to passengers while systematically reducing operating costs by 16% in real terms between 2014 and 2018. This transformation has allowed us to deliver the best airport service in Europe whilst airport charges dropped 16% in real terms in the same period. Sound management earned the confidence of private investors, and we steadily built up £3.0 billion in cash and committed facilities, by the end of April 2020, which our business can call on now.

Despite our strength, Heathrow will not be immune to this crisis. We must act responsibly to protect the long-term success of Heathrow and deliver on our commitments to all stakeholders that rely on our national critical role. The actions we are taking now are ones that none of us like having to do; reducing pay, restructuring the organisation, renegotiating contracts, consolidating down to just two terminals and a single runway. But this is what we have had to do to survive and remain competitive. The cost savings we are making now will help us to secure as many jobs as possible whilst maintaining the agility to return to growth when passenger demand increases.

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The financial position we built up over the past decade means that the actions we are taking now are compatible with maintaining our strategic long-term ambition of sustainable growth. Keeping people safe remains our first and non-negotiable priority. We're standing by our commitment as a Living Wage employer and our Prompt Payment Code pledge to pay suppliers within 30 days, we're providing our airlines with free parking for grounded fleets as temporary support and we're making every effort to keep Heathrow open and operating so that vital supplies can continue to come into the UK and Britons stranded abroad can get home. We are trying to retain as much as possible our incredible team talent which we will need in the recovery.

No one ever wanted to be in this position, but the determination, speed and grace with which my colleagues have responded to this crisis is a beacon of light in this stormy weather. We have the opportunity to turn this crisis into the springboard to adapt, transform and rethink our business and industry, if we remain pursuing our purpose of giving passengers the best airport service in the world. I thank all colleagues across Team Heathrow for their incredible contributions. We are in this together and we will continue to take responsible decisions that put Heathrow in the best position to support Britain's recovery after we've beaten COVID-19.

John Holland-Kaye CEO,
Heathrow Airport

Introduction and context

2 Introduction and context

2.1 Purpose

Heathrow Airport's Strategic Capital Business Plan (SCBP) is delivered annually in accordance with the Capital Investment Protocol.

The SCBP originally looked at the Quinquennium 6 (hereafter known as Q6) regulatory period April 2014 to December 2018, to inform the Airport Community of Heathrow's Capital Investment Plan and to facilitate consultation and engagement.

Towards the end of 2016, the CAA extended Q6 by one year so the regulatory period ended in December 2019 (Q6+1). This Plan reflects the ongoing work and formal engagement with the Airline Community to agree the quantum and contents of the Portfolio for 2019. The CAA has subsequently implemented a further two year extension to the Q6 price control to 31 December 2021 and called this further extension the "interim H7" (or "iH7") price control.

This report covers the period from January 2019 to December 2019 with a look ahead to 2020. Note that at the time of drafting this year's SCBP, Heathrow was in the process of reviewing its capital portfolio for 2020 and onwards, in light of the COVID 19 pandemic.

The content of the SCBP is as set out in the Capital Investment Protocol agreed with the Airline Community, published on the 30th March 2017.

Where airlines require further information to understand proposed investments, Heathrow will respond to these requests.

The SCBP 2020 is a document for consultation. Heathrow encourages the Airline Community and other stakeholders to submit their views on the Strategic Capital Business Plan by 30th September 2020 to alistair.maxwell@heathrow.com

Heathrow would like to thank the Airline Community for their responses to the SCBP 2019, which we have considered in developing this document.

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3 Strategy and vision

3.1 Heathrow's vision and priorities

Our Q6 plans were developed in line with the joint airline and Heathrow vision to be 'The UK's direct connection to the world and Europe's Hub of choice by making every journey better'.

Heathrow and the Airline Community developed four specific joint priorities for Q6: Passenger Experience, Hub Capacity and Resilience, Efficient Airline operations and a competitive cost of operation, through Constructive Engagement. These continue to shape and guide our thinking.

3.1.1 Heathrow's Vision, Purpose, Priorities and Values

Heathrow recognises that, in an industry dominated by global airline groups and alliances, Heathrow can compete for passengers' business with airports globally by giving the best airport service in the world. Consequently, we expanded Heathrow's long-term ambition, and in 2014 revised our corporate vision:

"To give passengers the best airport service in the world"

Our vision places the passenger at the heart of what we do and reflects our heightened ambition to deliver a level of service competitive with the best hubs in the world.

Figure 3.1 Heathrow's Vision, Purpose, Priorities and Values

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4.1 Transforming Customer Service

While we navigate these unprecedented times, our strategic priority to transform customer service: protecting our service and reputation remains:

Service standard performance indicators (1)	2019	2020
ASQ	4.18	4.20
Experience as "excellent" or "very good" %	82.6	84.1
Baggage connection	99.0%	99.0%
Departure punctuality	82.6%	83.4%
Security queuing	96.8%	97.4%
Connections satisfaction	4.15	4.19

(1) For the 3 months ended 31 March 2020

Heathrow's Capital Portfolio Objectives

In light of the Covid 19 crisis, Heathrow's capital portfolio is being prioritised against four key objectives, which has been shared with the community. These objectives are;

| 1. Preserve Cash	2. Survival	3. Efficiency	4. Growth
Minimise cash spend when demand has sharply declined and liquidity is stressed	First and foremost, prioritise initiatives that focus on business continuity and ensure we have a functioning operation that is agile enough to respond to future demand.	Initiatives that align to our desired operating model, enable future ways of working and that are more efficient than we were before.	Targeting initiatives that will prepare for future growth, but mindful of the current and potential prolonged reduction in demand.

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4.2   Status of Capital Portfolio

We are currently consulting with the CAA and airline community on the proposed value of the capital portfolio to cover the period to 31st December 2021 (to the end of the interim H7 period) and for the 2022-26 (H7 period). This will be confirmed in the final H7 business plan in expected in mid-2020. This excludes Category B and C planning costs or any other investment on Expansion. We will continue to work with all the relevant parties to achieve successful outcomes from the enlarged portfolio.

The 2020 capital portfolio, following the Covid 19 crisis and suspension of Expansion, was revised to no more than £445m for the year. There is an estimated remaining capital expenditure of £218m between April and December 2020 which has been summarised in 5 categories; Ongoing Programmes, Asset Replacement, Underutilised Infrastructure, 3R de-mobilisation and Negotiation costs. This has been presented and consulted on with Heathrow's key stakeholders.

Heathrow would also welcome a discussion with the CAA and the airline community on projects that have been postponed into 2021 or stopped and to review how these will be dealt with from a regulatory perspective.

Please note that all EAC values as at December 2019, shown below, are subject to review in light of the Covid Crisis and are being consulted on with the airline community through the existing governance forum.
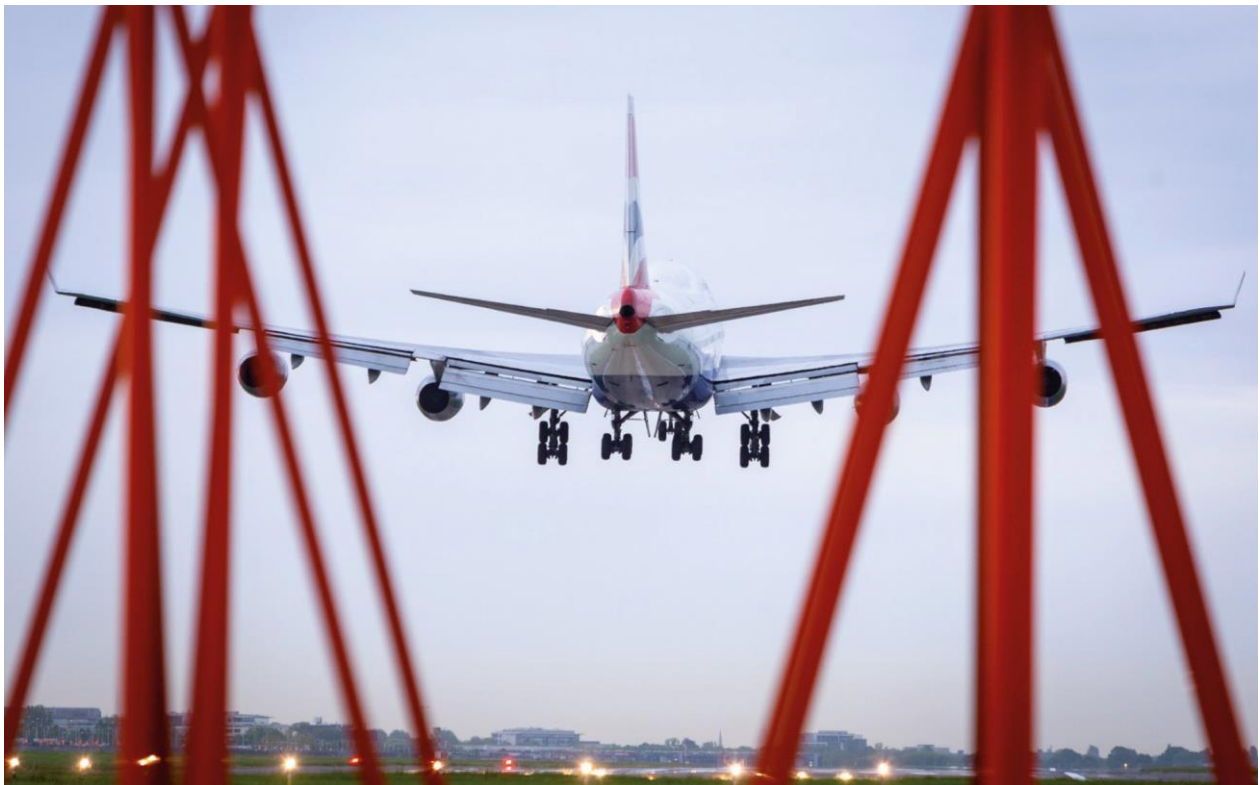
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4.3 Annual status of business cases by programme

4.3.1 Passenger Experience

The Passenger Experience Programme's objective is to use customer insight to ensure that everyone who travels through Heathrow will experience the best that modern Britain has to offer; seamless operations that make travelling more effortless and stress-free, with enticing and inspirational experiences that grow commercial revenue and realise operational cost efficiencies. Focus areas include the ongoing evolution of the on-airport proposition, increasingly intertwined with realising the opportunities presented by technology. Passenger Experience outcomes are tracked and measured through aligned business KPIs and indicators. The Passenger Experience Programme is made up of the Business Cases shown in the table below – note the December 2019 columns now include iH7 values below. Note that business cases listed B7XXX are new in the iH7 portfolio and hence have no Q6 settlement baseline value. The portfolio is progressively being developed so the detail below is a snapshot as at Dec 19;

Business Case	Settlement Description (where relevant)	Settlement Baseline (£m)	Dec 19 Baseline (£m)	Dec 19 EAC (£m)
B009 Northern Perimeter	Estimate - Increased capacity to the car parking estate to satisfy passenger demand. Solutions are focused on opportunities to improve the T5 campus and create opportunity for incremental growth in car parking revenue. Half of the project has been delivered.	9.7	3.1	5.0
B010 CTA Redevelopment	Allowance - for Phase 1 of the CTA Masterplan targeted at enhancing the experience of passengers using the CTA and to complement the quality of the new Terminal 2.	14.2	0.9	0.9
B018 T5 Connections Security Capacity	Estimate - to provide a new route via escalator to south security, and additional lanes.	23.5	38.9	37.9
B024 Commercial Advertising and Sponsorship	Estimate - Refresh and enhance the media estate in Q6. Scope is a mix of asset enhancements, end of life replacements, and new infrastructure to protect income and drive incremental revenue from direct advertising & sponsorship of 'assets'.	34.2	23.1	20.6
B025 Premium Passenger Products & Services	Allowance -Differential investment in support of lead passenger segments (Premium & UK Business). The objective is to identify and generate incremental revenue streams which also enhance the premium passenger experience.	6.6	3.2	3.2
B026 Security Fixed Post Modernisation	Estimate - Targeted initiatives that maximise the efficiency of the security operation through deployed technology. Capital investment is necessary to reduce the reliance on fixed post security officers to protect passenger routes and boundaries and deliver cost savings.	10.2	17.8	18.1

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Business Case	Settlement Description (where relevant)	Settlement Baseline (£m)	Dec 19 Baseline (£m)	Dec 19 EAC (£m)
B030 T1 Closure	Estimate - Phased closure of Terminal 1 (excluding the baggage system which is required to support T2).	8.4	6.5	6.0
B036 VIP Strategy - Commercial and Facility	Estimate - To maintain the existing suites.	7.4	0.0	0.0
B037 Airline Moves	Estimate - Terminal 1's airlines will be relocated to other Terminals per the agreed move sequence.	23.6	17.0	16.5
B038 Ops Efficiency and Continuous Improvement	Allowance - Set of workforce initiatives focused on continuous improvement and reducing the operational cost base.	6.0	7.0	6.8
B041 Commercial BAU fund	Allowance - High volume, low value (capex) investments, invested tactically over the Q as opportunity or need arises. Supports Retail, Commercial Passenger Services and Property teams.	32.8	40.7	38.0
B044 Commercial Systems Replacements and Upgrades	Estimate - Investment in retail concessions systems providing real time sales data. The solution facilitates improved decision-making and the accuracy of concession fee payments through the transition to automatic sales reporting. The system has been installed in Terminal 2. This investment extends the system to all retailers in Terminals 3, 4 and 5.	2.8	2.8	2.7
B045 Enhanced Terminal Facilities for Passengers	Allowance - Investment in hosting facilities to meet the growing expectations of passengers (in particular connections) that do not have access to airline lounges.	20.6	34.4	35.6
B081 T4 IDL Masterplan Phase 4 and enhancements	Estimate - Final element of the redevelopment of the T4 Independent Departure Lounge solution commenced in 2012. Drives commercial income through the creation of additional retail space and new merchandising opportunities.	8.2	7.5	7.4
B082 T5 CIP Expansion	Allowance - The capacity of existing CIP Lounge space in T5A is at capacity at peak. Facilities are not well placed to support British Airways' growth and lounge product strategy in their current configuration.	5.4	0.0	0.0
B092 UKBF Accommodation	Estimate - Investment is required to bring holding rooms up to a consistent standard in line with UKBF's national standards.	5.2	8.6	7.6
B094 Crossrail Contribution	Allowance - Heathrow's contribution to Crossrail is as determined by the CAA.	86.7	86.7	0.0

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Business Case	Settlement Description (where relevant)	Settlement Baseline (£m)	Dec 19 Baseline (£m)	Dec 19 EAC (£m)
B116 T3 Connections Security Capacity	Estimate - expansion of transfers security capacity.	39.9	84.4	94.2
B129 Automation of the Passenger Journey	Estimate - replacement of CUSS Kiosks.	9.7	0.5	0.5
B156 Surface Access Development Fund	Allowance - to protect Heathrow's interests during the consultation and planning for Southern Rail access and development of other Surface Access initiatives.	2.0	0.08	0.08
B204 Passenger Experience Programme Rollover (TR+M)	Rollover - items include T3 CIP Lounge, T3 Refurbishment, Premium security Fast Track, T4 Independent Departures Lounge and T5 Gate Luxury & T5 concessions.	20.2	36.9	36.0
B316 T3 Refurbishment and Enhancement	Estimate - scope include improvements to Zones B-G, T3 Façade, International Departure Lounge, HEX tunnel.	47.0	42.7	39.8
B329 Automation of the Passenger Journey	Allowance - Aligned to aviation industry led initiatives to deliver a simplified and streamlined end-to-end journey. Automated solutions being considered are self-service bag drop and self-boarding.	58.3	55.6	49.3
B400 T4 CSA Expansion (formerly B210)	Estimate - expansion of security capacity.	0.0	5.8	5.9
B411 T5 Additional Fast Track Capacity	Estimate - two additional lanes and a new route for premium passengers.	0.0	15.6	14.1
B416 Road Access Congestion	Allowance - to improve flow on the roads and resolve congestion areas.	0.0	0.5	0.4
B427 Security Scanner & ETD Regulation Changes	Estimate - additional security equipment to meet new requirements.	0.0	14.6	12.4
B429 E-Gates	Estimate - installation of additional e-gate in T3, T4 and T5.	0.0	8.4	7.2
B434 T5 Connections	Allowance - to reduce queueing and congestion and introduce automatic ticket presentation gates.	0.0	8.9	8.0
B451 4G Cellular Estate	Estimate - to upgrade the cellular infrastructure deploying common infrastructure in T3 & T4, as well as replacing life expired assets.	0.0	21.0	20.3
B455 T2 Check-in Enhancements	T2 Check-in Enhancements.	0.0	0.9	0.5

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Business Case	Settlement Description (where relevant)	Settlement Baseline (£m)	Dec 19 Baseline (£m)	Dec 19 EAC (£m)
B6611 Customer Channels. eBusiness and Systems	Improving a number of IT systems such as Retail Futures and contact management systems, as well as customer facing websites such as heathrow.com and the Heathrow Rewards website.	0.0	2.5	2.5
B6612 Retail Compliance and Capacity	The upgrade and provision of retail storage and stock areas on and off campus.	0.0	5.2	5.5
B6613 Retail and Property Shell and Core	Ensuring the retail and property proposition at Heathrow is optimised and meets the demand and expectation of passengers.	0.0	7.5	7.4
B6614 Retail Optimisation	Retail optimisation in Terminal 2 in order to improve the passenger experience.	0.0	28.7	31.2
B6616 Premium Service product Bundling		0.0	0.7	0.7
B6617 Telecoms	Telecoms minor works	0.0	3.4	3.4
B6618 Travel Services	Consolidating and optimising of the colleague and passenger car parking at Heathrow.	0.0	26.9	35.4
B6620 Commercial Agile Delivery	Agile fund	0.0	2.0	2.0
B6621 Heathrow Express New Fleet Onboard Service Proposition	Heathrow Express New Fleet	0.1	7.8	7.8
B6641 Care	Improving facilities for passengers with reduced mobility, visible and invisible disabilities across Heathrow.	0.0	23.1	17.7
B6642 Connections Improvements	Improving the Connections product in all terminals in order to improve passenger experience.	0.0	2.4	2.5
B6643 Onward Travel	Improving access in and out of the airport focusing on traffic management, taxi and coach operations.	0.0	7.6	7.4
B6644 Arrival Border Facilities	Improving the arrivals UKBF facilities.	0.0	4.7	4.7
B6646 Passenger Experience Enhancements	Agile delivery of initiatives that will improve the passenger experience in all terminals.	0.0	1.1	1.1
B6648 Charging Points and Powered Seating	Providing additional charging points and powered seating in order to meet arriving and departing passenger demand in all terminals.	0.0	0.3	0.3
B6649 Automate the Passenger Journey	Proving passenger automation solutions such as self-service bag drops and security SQR measurements	0.0	12.3	14.9
B6650 T2 Check in Capacity	Improve capacity at check in	0.0	3.7	3.7

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Business Case	Settlement Description (where relevant)	Settlement Baseline (£m)	Dec 19 Baseline (£m)	Dec 19 EAC (£m)
B6651 Safety and Resilience	Implementing solutions to improve the safety of passengers and colleagues travelling to and from and working at Heathrow	0.0	1.4	1.3
B6652 Automated Gate Announcement	Providing an automated gate announcement system in order to improve and speed up the boarding operation as well as improving the passenger experience	0.0	2.0	2.0
B6653 T3 Luggage Trolley Circulation	Improving availability of baggage trolleys in the baggage hall of T3 and improving the efficiency of airside/landside circulation	0.0	1.8	1.8
B6671 Terminal Protection	Ensuring security standards throughout the terminals for Heathrow passengers, staff and visitors.	0.0	3.8	3.4
B6672 Landside Protection	Providing security solutions that enhance the landside security within terminals.	0.0	4.0	4.0
B6673 Perimeter Protection	The protection of the Heathrow perimeter addressing CCTV, fencing and cargo access control.	0.0	16.7	16.7
B6674 Security Agile Initiatives	Agile delivery of initiatives that will address rapidly changing regulation or increases in the threat levels.	0.0	10.0	10.0
B6675 Regulated Terminal Security	The replacement of the current cabin baggage x-ray detection systems across all terminals to meet DfT regulation	0.0	108.2	108.2
B6676 Access Control	Installing access control gates at all ATP gates in order to prevent unlawful airside access through exception desks or tailgating.	0.0	2.2	2.2
B7611 Customer Channels	Improving a number of IT systems such as Retail Futures and contact management systems	0.0	25.2	25.2
B7612 Heathrow Retail	Fund for retail works	0.0	6.0	6.0
B7613 Heathrow Property	Fund for property works	0.0	13.8	9.3
B7614 Commercial Telecoms	Telecoms works	0.0	4.6	4.6
B7615 Surface Access		0.0	5.3	5.3

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Business Case	Settlement Description (where relevant)	Settlement Baseline (£m)	Dec 19 Baseline (£m)	Dec 19 EAC (£m)
B7618 Media Digitisation	Maintaining and improving digitisation at Heathrow	0.0	5.2	5.2
B7619 Heathrow Express	Works on Heathrow Express	0.0	0.8	0.8
B7622 VIP Refurbishment	Improve VIP facilities	0.0	0.5	0.5
B7623 WorkSmart	Enable more agile working practices	0.0	0.5	0.5
B7625 HEX Room Renovation Programme	HEX facilities improvement for colleagues	0.0	0.1	0.1
B7641 Multi Faith Facilities Improvement	Multi Faith Facility Improvements	0.0	0.5	0.5
B7642 Connections Improvements	Improve connections performance and passenger journey	0.0	0.5	0.5
B7643 Care	Works related to improving PRM journeys	0.0	9.9	9.9
B7644 Arrivals Border Facilities	Improving arrivals facilities and improve arriving passenger journeys	0.0	0.5	0.5
B7646 Passenger Experience Enhancements Agile	Agile fund	0.0	2.0	2.0
B7648 Charging Points and Powered Seating	Providing better facilities and passenger journey for passengers	0.0	0.5	0.5
B7649 Automating the Passenger Journey	Proving passenger automation solutions such as self-service bag drops and security SQR measurements	0.0	30.6	30.6
B7651 Safety and Resilience	Agile fund for health and safety	0.0	1.4	1.4
B7652 Health and Safety Agile Initiatives	Agile fund for health and safety	0.0	0.5	0.5
B7675 Regulated Campus Security	The replacement of the current cabin baggage x-ray detection systems across all terminals to meet DfT regulation	0.0	1.5	1.5
B7679 Security Assurance	Improving security facilities	0.0	10.7	10.7

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4.3.2 Airport Resilience

The Programme vision is to provide 'A resilient airport with capability to meet demand and recover quickly', enabling Heathrow to meet the challenge of delivering higher service standards and lower costs.

This Programme will achieve its vision through objectives that include:

- Creating 'headroom' through the efficient use of technology, enhanced processes and airport infrastructure
- Accommodating future demand for a new generation of wide-bodied aircraft
- Building greater resilience to adverse weather and other events, enabling a quick and safe recovery of the airport operation
- Driving resilience and efficiency improvements in our operational facilities and processes, while maintaining the highest safety standards.

The Airport Resilience Programme is made up of the Business Cases shown in the table below:

Business Case	Settlement Description (where relevant)	Settlement Baseline (£m)	Dec 19 Baseline (£m)	Dec 19 EAC (£m)
B033 Additional Fuel Infrastructure	Allowance - the CAA determination of capex. To increase fuel resilience at Heathrow.	160.3	2.1	2.7
B035 Aircraft De-Icing Infrastructure & Process	Allowance - for enhancing de-icing capabilities.	54.9	15.3	15.1
B039 Noise Compliance	Estimate - To provide an improved and automated system for the management of aircraft noise data, which will enable Automatic aircraft noise reporting, an increased horizon, near live data, ground movement monitoring, monitor/analyse Time Based Separation, and directly supports airspace changes.	2.5	4.1	3.9
B043 APOC	Rollover - for completion of APOC.	10.0	10.8	10.2
B062 Cargo Centre Southside	Estimate - Support the cargo community with improved access to the airfield and cargo facilities, by redesigning the control post infrastructure and operational controls in the cargo area.	16.1	0.0	0.0

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Business Case	Settlement Description (where relevant)	Settlement Baseline (£m)	Dec 19 Baseline (£m)	Dec 19 EAC (£m)
B073 Air Quality - Vehicle Charging	Allowance - Provision of vehicle charging infrastructure enabling HAL and 3rd parties to utilise alternative fuels.	5.3	6.6	6.3
B098 Kilo Taxilane and Stands 234/5	Estimate - Removal of Europier and existing stands, construct the kilo taxilane and stands 234/5 along with safeguarded tunnels infrastructure below.	113.3	0.0	0.0
B111 Enabling New Generation of Wide Body Aircraft - Airfield	Estimate - Stand 255, Northern CTA taxiways, Sierra A and Sierra C taxiways.	85.0	120.3	123.3
B112 Airfield Efficiency & Resilience	Allowance - To enable consistent and cost-effective delivery of the forecast aircraft schedule (including next generation aircraft) by operating to plan, increased precision of arrivals and maintaining departures punctuality. Work includes: Time Based Separation, airspace changes, independent arrivals, and new approach aids.	32.0	37.1	34.6
B117 T4 Infrastructure Improvement	Estimate - provision of additional Code F stands and joining of reclaim belts 7A and 7B.	26.7	17.5	17.0
B134 PCA Additional Infrastructure	Allowance - provision and installation of pre-conditioned air units for long haul stands that do not currently have the Scope has been consolidated here from B334 and B317.	2.1	12.7	11.6
B206 Airport Resilience Programme Rollover (COp)	Rollover - includes T4 baggage reclaim hall, T5 TTS Enhancement, T3 and T4 loading Bay, and Airside Operations Facility.	25.1	47.4	47.1
B211 AGL Control System & Primary Cabling	Estimate - replacement of airfield lighting control system.	0.0	39.7	39.2
B243 Kilo Apron Development	Estimate - consolidation of T1 Opportunity Stands and Kilo Taxiway works.	0.0	313.4	316.3
B311 Enabling New Generation... - RAT, RETs Remote Stands and FEGP	Estimate - Removal of Cranford (RAT, Noise wall), 4 additional RETS, CTA remote stands, FEGP provision for new aircraft types.	111.4	1.4	1.4
B312 Airfield Efficiency and Resilience	Allowance - in addition to B112.	19.4	13.0	14.5
B317 T4 Infrastructure Improvement - HV and Arrivals	Allowance - Provision and installation of new high voltage electrical infrastructure in T4. This also includes improvements to T4 arrivals forecourt.	20.0	0.0	0.0
B409 MSCP 4	Estimate - to alleviate short term congestion issues.	0.0	0.3	0.4
B415 A320 Sharklet Strategy	Allowance - modification to stand infrastructure to accommodate larger wingspans.	0.1	0.1	0.1

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Business Case	Settlement Description (where relevant)	Settlement Baseline (£m)	Dec 19 Baseline (£m)	Dec 19 EAC (£m)
B428 EASA	Estimate - to utilise the revised EASA clearance to improve the performance of the airfield	0.0	0.2	0.2
B433 T2 DtS Option 7	Estimate - change priority from domestic to international operations.	0.0	0.8	0.9
B6111 Airport Safety and Sustainability	Ensuring the safety of airside operations through sustainable projects	0.0	0.5	0.5
B6112 Airfield Radar Safety and Security	Improving the capability and resilience of the FOD radar.	0.0	2.0	2.0
B6113 Airside Compliance and Response	Agile delivery of initiatives that will address rapidly changing EASA, CAA and other regulation changes.	0.0	8.7	10.5
B6114 Runway Hold Standardisation	Infrastructure improvement works	0.0	3.6	3.6
B6115 Airside Asset and Facilities	Various facility and asset improvements to support Airside Operations.	0.0	3.9	3.9
B6116 Airside Vehicle Renewal	Renewing life expired and non-compliant airside vehicles.	0.0	3.5	3.5
B6117 Airside Vehicle Renewal	Improving airside operational facilities and tools.	0.0	0.2	0.3
B6118 Stand Capacity and Efficiency	Reconfiguring Stands 323 and 325.	0.0	0.0	0.0
B6119 Tower Transformation	Replacing the existing contingency tower facility and upgrading the existing operational ATC tower.	0.0	73.1	73.1
B6120 De-Icing and Winter Operations	Providing the necessary winter operations equipment and de-icing resources.	0.0	2.0	2.0
B6121 ATM and Ground Floor Efficiency	Ensuring efficient air traffic movement and ground flow at Heathrow.	0.0	5.5	5.5
B6123 Transform Ground Operations	Automation overlay across all pier served stands	0.0	0.6	0.6
B6163 Operating to Plan Phase 2	Enabling resource planning in advance and optimising the daily operation.	0.0	0.3	0.3
B6124 NAVAIDS Replacement	Covers replacement of NATS ATM critical assets (assets, hardware and software) for the Tower and VCF	0.0	3.3	3.3
B6211 EV Charging Infrastructure	Enhancing the electric vehicle charging infrastructure to enable a wider use of electric vehicles	0.0	0.0	0.0
B6619 Cargo Improvements	Improving cargo facilities focusing on insight and forecasting tools, stillage.	0.0	27.2	27.5
B6677 C-UAS	Counter unmanned aerial systems (drone) detection network and protective measures for the airfield	0.0	14.0	14.0
B7111 Eastern Tug Road	Improvements to the contingency route used when the Cargo Tunnel is closed	0.0	0.5	0.5

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Business Case	Settlement Description (where relevant)	Settlement Baseline (£m)	Dec 19 Baseline (£m)	Dec 19 EAC (£m)
B7113 Additional Fuel Infrastructure	Additional fuel storage facility on Stand 596 (adjacent to Perry Oaks Fuel Farm) to improve resilience; development of Stand 574 to compensate loss of Stand 596	0.0	114.7	114.7
B7114 2R Airspace Changes	Deliver CAA-approved Airspace Change projects in a 2-runway operational environment enabling efficiencies and reduced noise pollution	0.0	8.2	8.2
B7116 ATM Departure Efficiency	Increase the efficiency of aircraft operations on departure from Heathrow by revising the procedures and tools support, thereby increasing the available departure rate	0.0	0.5	0.5
B7118 Operations EV Charging Infrastructure	Providing EV charging infrastructure to support more sustainable travel	0.0	10.7	10.7
B7119 Smart Stand	Introduction of automated stand equipment and processes	0.0	2.4	2.4
B7161 IATA Ground Operations Manual Implementation Enablers	Adoption of IATA Ground Operations Manual (IGOM) to support improved safety compliance, operational resilience and capacity growth.	0.0	0.1	0.1
B7216 AGL Reinforcement	Replacement of life-expired and obsolete components within the AGL Control System which are now posing an operational risk to the business	0.0	14.0	14.0
B7620 Surface Access EV Charging Infrastructure	Providing EV charging infrastructure to support more sustainable travel	0.0	9.7	9.7

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4.3.3 Asset Management

The Asset Management Programme will deliver assets at the best whole life value, while reducing risk and optimising performance. This will be carried out for each of the Engineering, IT and Rail parts of our business.

The Programme will deliver its vision through objectives that include:

- Harm no-one that builds, maintains, operates or uses our assets

- Meet 100% of our licencing and legislative requirements

- Reduce total expenditure (Opex and Capex) over the long term by optimising cost, risk and performance and working towards the 'Asset Management Blueprint'

- Enable the flight schedule to be fully complete every day

- Understand and manage asset-related risks so that we continuously improve operational resilience

- Understand, define and meet the performance that our customers (including colleagues, passengers and airlines) want from our assets, making sure there are no surprises

- Deliver the Masterplan as efficiently as possible and provide capacity just ahead of planned demand

- Meet our environmental and sustainability targets

- Ensure our assets are adaptable and can efficiently meet our customers' future needs

The Asset Management Programme is made up of the Business Cases shown in the table below:

Business Case	Settlement Description (where relevant)	Settlement Baseline (£m)	Dec 19 Baseline (£m)	Dec 19 EAC (£m)
B008 Crossrail	Heathrow must ensure that Crossrail services are able to operate on Heathrow infrastructure.	0.0	5.4	5.4
B028 Metering & Energy Demand Management	Allowance - Provide improved energy consumption analytics for HAL Engineering to reduce costs and achieve the target set for carbon emissions reduction. This will be enabled through Automatic meter reading technology installation across Heathrow. Delivery of a range of projects to reduce energy consumption through introduction of new technology, on-demand assets and optimisation of set point controls.	14.0	40.0	39.6
B047 Consolidated HAL landside Ops/Eng facility	Estimate - to consolidate multiple buildings to enable the full benefits of the engineering Change programme.	5.5	0.0	0.0
B066 Energy and Utilities Management - Supply	Estimate - to convert the CTA heat exchangers from High Temperature Hot Water to Low Temperature Hot Water, and associated work to the district heating pipework.	1.6	51.1	48.3
B101 Engineering Asset Replacement	Estimate - Asset replacement or refurbishment aligned to the principal Asset Management objectives to reduce opex and optimise for risk and performance.	595.1	504.0	496.4

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Business Case	Settlement Description (where relevant)	Settlement Baseline (£m)	Dec 19 Baseline (£m)	Dec 19 EAC (£m)
B102 Rail Asset Replacement	Estimate - Refurbish and replace key Rail Operating and Infrastructure assets. This will be done to sustain current operational performance levels, to deliver Heathrow Express service throughout Q6 and ensure assets are fit for purpose when Crossrail commences.	52.8	65.8	70.2
B127 Surface Water Management Infrastructure	Estimate - Improve the performance of the surface water pollution control system across the Eastern catchment.	16.1	21.7	30.2
B131 CTA and Cargo Tunnels	Rollover - Tunnels compliant with appropriate legislation and best practice, this includes: Refurbishing and replacing the tunnel asset systems; ventilation system; fixed fire suppression; structural fire protection; lighting; electrical and water systems; and, emergency sign and closure systems.	117.3	133.2	337.0
B207 Asset Management Programme Rollover (POP)	Rollover - main items include runway rehabilitation, core electrical distribution upgrades, sweeper tip, T3 roof works, and replacement of HV intake cables.	33.5	47.3	46.7
B303 IT Asset Replacement	Allowance - Provide Heathrow with a reliable and performing IT estate that will continue to efficiently support, at minimum operating cost, the operations of the airlines and the wider airport community.	25.9	17.9	17.9
B401 Rapid Goods Screening Relocation (formerly B212)	Estimate - relocation of RGS from southside to Colnbrook Logistics Centre.	0.0	2.8	2.7
B439 - Perimeter Fence	Estimate - upgrade of perimeter fence.	0.0	5.2	4.8
B6201 – Asset Legal and Compliance	Improving and replacing life expired life safety systems	0.0	36.9	35.2
B6202 – Pavement Safety and Resilience	Renewing landside roads, lighting and traffic signals	0.0	22.7	23.3

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Business Case	Settlement Description (where relevant)	Settlement Baseline (£m)	Dec 19 Baseline (£m)	Dec 19 EAC (£m)
B6203 Passenger Experience Improvements	Improving the passenger experience by upgrading or replacing life expired facilities such as toilets, lifts and airbridges.	0.0	84.1	102.8
B6204 Water Quality Improvements	Improving water quality by upgrading a number of life expired water systems across Heathrow.	0.0	19.0	19.1
B6205 Operational Improvements	Improving and replacing life expired operational systems.	0.0	55.5	55.5
B6206 Rail Asset Management	Upgrading and replacement of life expired rail assets such as lifts, heavy rail assets, HVAC and TTS handrails.	0.0	36.5	37.8
B6207 Rail Fleet Management	Managing, maintenance and replacement of the rail fleet.	0.0	4.1	4.1
B6209 Landside Cark Park Renewal	Renewing PEX and T2/3 long term car park surfaces.	0.0	5.1	4.9
B6210 Airfield Pavement Renewal	Renewing of airfield pavement including taxiways and Southern Runway Phase 2.	0.0	33.8	28.2
B6212 Asset Spatial Integration Phase 2	Asset Spatial Integration Phase 2	0.0	2.8	2.8
B6213 Engineering Agile Delivery	Agile fund	0.0	26.1	26.1
B6214 Delivering Sustainable Growth	New facility for disposing of solid airside waste, ensuring compliance with Thames Water and Environment Agency	0.0	44.8	44.8
B7201 Cargo Tunnel Parapet Strengthening	Improvements to the Cargo Tunnel	0.0	5.6	5.6
B7205 Operational Improvements	Managing, maintenance and replacement of operational assets	0.0	25.7	25.7

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B7209 Car Parks Renewal	Relocation of HAL data from US servers to servers in the EU using cloud-based services.	0.0	7.0	7.0
B7213 Engineering Agile Delivery Works IH7	Agile fund	0.0	0.8	0.8
B7215 Solar Project	To develop and deliver scope to further improve Heathrow's sustainability	0.0	0.5	0.5
B7621 MSCP4 Long Term Strategy	Includes safety related works as well as capacity	0.0	77.3	77.3

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4.3.4 Baggage

The vision for the Baggage Programme is, 'to deliver leading end-to-end baggage performance amongst European Hubs, at a competitive cost, by working safely together as a community'.

The Baggage Programme's objectives are:

- To comply with Department for Transport hold baggage screening requirements
- To reduce the baggage misconnect rate
- To simplify and consolidate systems to deliver efficiencies
- To reduce the rate of injuries associated with baggage operations
- To enable growth in passenger numbers.

The Baggage Programme is made up of the Business Cases shown in the table below:

Business Case	Settlement Description (where relevant)	Settlement Baseline (£m)	Dec 19 Baseline (£m)	Dec 19 EAC (£m)
B006 Improved Baggage Capacity & Resilience	Estimate - A number of elements are being considered, including: T5 Early Bag Store; T5C ULD storage (power); T5 dual off load; T5 sorter to/from reclaim; and T5 bag check units.	38.9	43.7	39.9
B051 T3IB Rollover	Rollover - for completion of T3IB.	90.3	89.2	129.7
B097 T1 Baggage Resilience	Allowance - to provide a transfer break and pre-sort facility close to the T1 baggage system with sufficient capacity to handle the T1&T2 inbound transfer traffic during contingency.	11.8	31.6	31.6
B099 T3 Baggage Enhancements	Estimate - addition loop will provide resilience to Baggage operations. The Arrivals Road will also be upgraded to current standards.	9.1	8.7	9.4
B205 Baggage Programme Rollover (Baggage)	Rollover - includes HIBS (T5WBU moved to B238).	15.3	19.9	17.9
B216 HBS and Asset Replacement	Estimate - Targeted asset replacement or refurbishment aligned to the principal Asset Management objectives and installation of new standard 3 HBS machines.	508.4	478.0	660.0
B238 Western Baggage Upgrade	Estimate - replacement high level control.	0.0	20.7	25.9
B423 Baggage Resilience	Allowance - to respond to the finding of the baggage review and to improve resilience.	0.0	22.0	23.0
B442 T4 Baggage Out of Gauge Reclaim	Allowance - to improve the Out of Gauge facilities in T4.	0.0	8.7	6.9
B464 Baggage Improvements	Improvements to various baggage systems and processes.	0.0	12.6	12.6

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Business Case	Settlement Description (where relevant)	Settlement Baseline (£m)	Dec 19 Baseline (£m)	Dec 19 EAC (£m)
B466 T5 Fast Track	Improvements to T5 baggage system.	0.0	14.7	9.3
B477 Baggage environmental controls	Improvements to the environment of baggage areas for safety, welfare and optimal operations.	0.0	5.8	7.4
B6311 Western Campus Baggage Product Resilience	Providing additional resilience and recovery capability in the T3 baggage areas.	0.0	7.1	7.1
B6312 Eastern Campus Baggage Product Resilience	Providing additional resilience and recovery capability in the T1 and T4 baggage areas and the baggage tunnel between T1 and T4.	0.0	12.8	11.9
B6313 Baggage Asset end of Life Management	Replacing key baggage assets that are or will be obsolete in 2019.	0.0	71.9	71.9
B6314 Safe Manual Handling	Providing manual handling aids in baggage areas across Heathrow.	0.0	21.7	20.8
B6315 Baggage Safety and Welfare	Improving the work and comfort facilities for colleagues in baggage areas across Heathrow.	0.0	9.2	14.3
B6316 Baggage Capacity Enhancements	Increasing baggage capacity in T2 and T3 at current peak periods and supporting capacity increase at Heathrow.	0.0	3.0	3.0
B6318 Baggage Automation	Introduction of automated baggage solutions at Heathrow.	0.0	2.5	2.5
B6319 Improve Baggage Performance	Improving processes, systems and infrastructure to increase the number of passengers travelling with their bags.	0.0	1.0	1.0
B7313 Baggage Asset End of Life Management	Replacing key baggage assets that are or will be obsolete	0.0	1.4	1.4
B7320 Western Campus PILZ Safety System Obsolescence	Replacing key baggage assets that are or will be obsolete	0.0	10.0	10.0

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4.3.5 Business Information Technology Programme

The Business and Information Programme was formed to optimise the value of Information and Technology investment across Heathrow through iH7 to enable the masterplan, increase productivity, make us more resilient & lower the total cost of change to achieve maximum benefit across various Heathrow priorities.

This would be achieved whilst
- balancing the trade-off between Heathrow Business functions to ensure their priorities are achieved
- simplifying the way in which we work with business colleagues and our supply chain to land successful business change
- streamline, consolidate and simplify the HAL technology estate
- preparing for the "growth" agenda
-
The programme will;
- Drive value through cross functional prioritisation and re-balancing
- Align to Heathrow Business strategies and growth agenda shaped by Information Technology strategies
- Solicit conscious collaboration & advocacy from Business Directors & colleagues
- Act as the IT Investment Stewardship to ensure investment align to Heathrow's ambitions

The Business Information Technology is made up of the Business Cases shown in the table below:

Business Case	Settlement Description (where relevant)	Settlement Baseline (£m)	Dec 19 Baseline (£m)	Dec 19 EAC (£m)
B015 OSCAR	Estimate - To rationalise, update and optimize the IT estate. Protect the operational use and functions of the seven critical IT systems utilised by HAL and the airport community e.g. IDAHO.	0.0	26.1	26.1
B020 Commercial IT & Telecoms	Allowance - Targeted investment in income generating Commercial IT & Telecoms to enable the continued development of products that keep pace with technology advancements, and the needs of the Airport community and passenger.	0.0	18.8	18.7
B023 EBusiness Development for Heathrow	Allowance - Scope includes a number of initiatives that build on Q5 success to launch and develop a multi-channel communication strategy. Digital channels enable greater personalised service making it easier for passengers to use Heathrow and generating additional revenue through new ways of marketing Heathrow's commercial offering.	0.0	12.4	13.8
B068 Security SQR Harmonisation	Estimate - The CAA Licence Condition includes a harmonised security waiting time standard for direct and transfer passengers of 99% of passengers waiting less than 10 minutes. The technology to enable per passenger queue measurement will be implemented in all Heathrow terminals	0.0	5.8	5.2
B103 IT Asset Replacement	Estimate - Provide Heathrow with a reliable and performing IT estate that will continue to efficiently support, at minimum operating cost, the operations of the airlines and the wider airport community.	0.0	95.4	95.1
B164 Back Office IT	Estimate - Provide Heathrow with a reliable and performing IT estate that will continue to efficiently support, at minimum operating cost, the operations of the airlines and the wider airport community. In addition, as a result of the refresh activity, the IT estate will have been further rationalised, optimised and updated.	0.0	30.6	32.2
B169 Asset Management Programme	Estimate - To embed good practice asset management capability throughout our business, by introducing a management system for the asset base built on industry best practice; process changes; and, organisational change.	0.0	17.5	17.2
B421 Airport Efficiency and Performance	Estimate - further works in APOC to improve operational performance	0.0	17.1	17.1

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Business Case	Settlement Description (where relevant)	Settlement Baseline (£m)	Dec 19 Baseline (£m)	Dec 19 EAC (£m)
B465 Baggage IT Resilience	Improve Baggage IT resilience	0.0	12.5	15.0
B6161 Resource Management and Allocation	Enabling a motivated workforce through effectively managing resources by deploying a RMS tool	0.0	0.1	0.1
B6162 Stand Planning and Allocation	Improve stand planning and allocation capabilities	0.0	3.5	3.5
B6163 Operating to Plan Phase 2	Enabling resource planning in advance and optimising the daily operation in order to offer an improved passenger experience	0.0	3.5	3.5
B6164 Passenger Flow Monitoring Phase 2	The second flow of passenger flow monitoring aiming to enhance the operational planning by improving planning updates	0.0	2.0	2.0
B6166 Incident Communications and Management	Enabling community wide communication of the daily operation and incident updates	0.0	0.7	0.7
B6167 Control Room Automation	The automation of a number of systems on APOC	0.0	3.9	3.9
B6169 OSCAR Phase 2	Rationalising, updating and optimising the IT estate. Protecting the operational use of several critical IT systems utilised by HAL	0.0	2.9	2.9
B6361 Baggage IT Obsolescence	Addressing baggage IT obsolescence across Eastern and Western campus.	0.0	11.2	11.2
B6362 Baggage IT Resilience	Addressing baggage IT resilience	0.0	0.9	0.9
B6363 Baggage IT Security Compliance	Maintaining baggage IT compliance with HAL information security policy, infrastructure and platforms.	0.0	30.0	30.7
B6364 Maintain Baggage Performance	Capturing and using real time data to help maintain and improve the baggage system performance.	0.0	6.7	6.7
B6365 Baggage Western Campus Optimisation	Optimising baggage performance	0.0	10.9	13.0
B6501 CYBER Security Programme	Increasing resilience and protecting the IT infrastructure to a sufficient level in order to prevent cyber attacks.	0.0	19.4	19.4
B6502 Networks	"Upgrade of Heathrow T5 fire alarm network, campus telephony system and key network switches. Design of the next set of wireless access points to be upgraded and the full decommission of the analogues radio platform."	0.0	5.5	5.5
B6503 Infrastructure and Platforms	Maintaining the IT infrastructure and platforms supporting critical systems in order to increase resilience against cyber attacks and improve recovery times during disruption.	0.0	21.8	21.8
B6504 Oracle eBusiness Suite Upgrade	Relocation of HAL data from US servers to servers in the EU using cloud based services.	0.0	0.0	0.0
B7162 OSCAR Phase 3	To preserve and protect the operational use, manageability, and functions of ten critical operational systems	0.0	0.5	0.5
B7361 Logistics and Conformance - Client refresh		0.0	0.3	0.3
B7501 Cyber Phase 3	To reduce exposure to cyber risk, increase resilience and increase awareness	0.0	37.0	37.0

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Business Case	Settlement Description (where relevant)	Settlement Baseline (£m)	Dec 19 Baseline (£m)	Dec 19 EAC (£m)
B7502 WLAN Access Points and Access Switch Replacements	Upgrade hardware serving public and office areas to provide increased capacity and bandwidth as well as reducing power consumption and support costs	0.0	7.7	7.1
B7505 Radio Coverage	To increase the Coverage throughout the HAL estate of the TETRA Heathrow Radio System which has been implemented by the Radio Upgrade Programme, covering business critical areas of the estate.	0.0	25.8	25.8
B7506 Radio Migrations	Minor works for 2019 to 2021	0.0	1.5	1.5
B7507 SAP BPC v10 Upgrade	To upgrade Heathrow's core Finance system to avoid any risk to current capability on which our reporting relies	0.0	3.9	3.9
B7508 Corporate Finance	To ensure continued operation of business critical financial systems	0.0	0.3	0.3
B7509 Magenta	Implementing a solution for a modern solution, that is fit for the future and sustainable for Heathrow	0.0	61.0	61.0
B7510 Safety & Sustainability Improvements	Safety and Sustainability Improvements	0.0	0.3	0.3
B7511 EPPM Replatform	Opportunity for Heathrow to review usage and simplify the Primavera Enterprise Licencing agreement	0.0	1.1	1.1
B7512 New Generation Noise & Track - Tranche 1	Further enhancements to allow HAL to meet public obligations on noise and air quality management.	0.0	2.5	2.5
B7513 AAIM Enhancements	Opportunities to further improve the efficiency of the airside inspection regime by streamlining some of the processes	0.0	2.5	2.5
B7677 SQR Harmonisation	A single solution into Passenger areas to provide data to help maximise use of existing capacity, enable performance optimisation	0.0	20.0	20.0

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4.3.5 Terminal 2 – Programme closed

The objective of this Programme is to complete the works commenced in Q5 on Terminal 2. The opening of T2 has enabled us to improve the overall Heathrow passenger experience.

An allowance has been made to start with the planning application and enabling works for the expansion of Terminal 2 in future regulatory periods.

The Terminal 2 Programme is made up of the Business Case shown in the table below:

Business Case	Settlement Description (where relevant)	Settlement Baseline (£m)	Dec 19 Baseline (£m)	Dec 19 EAC (£m)
B150 T2 Phase 1 completion	Rollover - for completion of T2 A phase 1 and moving in of airlines.	58.9	93.4	97.6

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4.3.6 Q6 Realisation Programme

The Objective of the Programme is to 'Integrate and optimise Heathrow's plan to deliver the settlement and our vision'.

The Programme seeks to achieve this objective through continuously aligning our strategy with our portfolio to achieve our vision.

The Q6 Realisation Programme is made up of the Business Cases shown in the table below:

Business Case	Settlement Description (where relevant)	Settlement Baseline (£m)	Dec 19 Baseline (£m)	Dec 19 EAC (£m)
B077 Hillingdon Community Trust	Estimate - This reflects commitments made as part of the planning processes for T5 and T2.	2.8	2.8	0.5
B078 LACC Project Manager	Estimate - provision of Project Management services to aid with airline community engagement and consultation.	0.6	0.6	0.6
B154 Heathrow Additional Capacity	Allowance for design and enabling works for the extension of T2A and the construction of T2C. As at December 2017, the proposal is to use the Baseline in 2018 to progress the commencement of T5+, T1/T2 baggage system, and other Heathrow additional capacity scope to be developed throughout 2018.	4.8	11.8	0.3
B176 Funds for Independent Funds Surveyor	Allowance - This business case will facilitate the implementation of Gardiner and Theobald as the IFS.	3.2	5.5	5.5
B208 Q6 Realisation Rollover (Q6 Realisation)	Rollover - includes CCTV work; document management; and, treasury accounting.	3.4	4.6	4.4
B241 Portfolio Balance	Allowance - This was a holding business case for the original Q6 period 2014-2018 – budget to be removed via change control following airline consultation	0.0	0.0	0.0
B376 Funds for Independent Funds Surveyor**	Allowance - This business case to facilitate additional implementation of Gardiner and Theobald as the IFS.	3.5	0.0	0.0
B900 Q6 + 1 Balance	Allowance - holding business case for development of Q6+1 scope.	0.0	0.0	0.0

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4.3.7 Additional Capacity – T5 & T3 Plus and Future T2 Baggage

Following a review of Heathrow's capital portfolio for 2020 and onwards, in light of the Covid 19 crisis, the Heathrow Additional Capacity programme has been put on hold and will be reviewed on an ongoing basis.

The objective of the Heathrow Additional Capacity (HAC) programme is to provide a value for money solution to deliver additional capacity within Terminal 5 and the airfield to allow growth opportunities for all airlines across the Heathrow campus ahead of a 3rd runway. This will require a rebalancing of flights and airlines between terminals. The programme will enable an additional 10mppa in T5. This capacity will be delivered in 3 phases to align to the forecast passenger demand:

Phase 1 delivers 5mppa by December 2022

Phase 2 delivers 3mppa (total 8mppa) by Dec 2023

Phase 3 delivers 2mppa (total 10mppa) by Dec 2025:

The Future T2 Programme is a new strategic programme established in Q3 2019. It is a £1.83bn investment over 8 years and will replace the T1 baggage operation system with a new system in a new deep basement between T1 and T2, with objectives to include:

- Complying with Department for Transport hold baggage screening requirements

- Reducing the baggage misconnect rate by replacement of the life expired baggage handling system in T1

- Simplifying and consolidating processes and systems to deliver efficiencies

- Reducing the rate of injuries associated with baggage operations

- Demolition of the T1 FCC, Nose Building, remainder of Pier 3 and MSCP1

- Construction of a 26m deep basement and connection to existing tunnels & basements to WIB, T4 and T2B

- Enabling growth in passenger numbers by enabling the future extension of T2 and remodelling of the eastern side of the CTA

- Safeguarding for cross campus connectivity by passenger and bags in new underground systems.

The Additional Capacity Programme is made up of the Business Cases shown in the table below:

Business Case	Settlement Description (where relevant)	Settlement Baseline (£m)	Dec 19 Baseline (£m)	Dec 19 EAC (£m)
B6401 T5 Plus	Delivering additional capacity and revenue in T5.	0.0	932.2	932.2
B6404 T3 Plus	Delivering additional capacity and revenue in T3.	0.0	3.6	3.6
B6402 T2 Future Baggage	Improving or replacing the T2 baggage system	0.0	1840.2	1840.2

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4.4 Independent Fund Surveyor update

The objective of the Independent Fund Surveyor (IFS) is to provide an on-going assessment of the reasonableness of all key decisions made on key projects and to ensure that capital is being used effectively to deliver the outcomes determined by the Business Case. The IFS is not a responsible party in the delivery of the projects.

In 2013, Heathrow and the Airline Community agreed the terms of IFS appointment as a joint appointment by Heathrow AOC Limited and Heathrow Airport in Q6.

Gardiner & Theobald (G&T) have been appointed to provide the IFS services.

The IFS are reporting at Gateways and on a monthly basis during the development and delivery phases of the projects. They present a selection of their monthly reports at the Capital Portfolio Board (CPB), as agreed with the airline community at the IFS Working Group

The key activities and benefits of the IFS are to:

- Focus on the processes being followed, the assumptions being made and the overall appreciation of the risks being managed

- Enhance the current system by providing real time reviews / reporting through the gateway lifecycle process

- Add value to the delivery of the capital portfolio by providing an increased level of confidence to all parties

- Significantly simplify regulatory capex efficiency reviews, which was the case in terms of the End of Q6 Review that was undertaken in 2019.

The IFS were deployed to monitor 3 Programmes and 30 projects in Q6+1 of which 3 Programmes and 23 have carried on in to iH7. We engaged and continue to engage with the community regarding the scope of IFS deployment on the iH7 portfolio.

4.5 Updated list of key projects, triggers and IFS deployment

The list of projects which are either key, triggered or monitored by the IFS is below. This list has been updated during 2019 following consultation with the Airline Community.

Key Projects / Business Cases	Trigger(s)	Trigger Scope	IFS	IFS Scope
B051 T3IB Q5 Rollover	1 - Trigger complete	Q6 rollover trigger agreed (Cut-ins complete and system operational)	Y	T3IB Rollover spend IFS review complete
B117 T4 Infrastructure Improvement	1 - Trigger complete	Q6 rollover trigger complete (stand 410)	Y	T4 Code F Stands (410, 411, 412) IFS review complete
B207 Asset Management Programme Rollover	1 - Trigger complete	Q6 rollover trigger complete (Northern runway)	Y	Northern Runway IFS review complete
B018 T5 Connections Security Capacity	1 - Trigger complete	Transfers security escalator	Y	T5 Transfer Security Capacity IFS review complete

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Key Projects / Business Cases	Trigger(s)	Trigger Scope	IFS	IFS Scope
B101 Engineering Asset Replacement - T3 Pier 7 Roof, HVAC, Chillers and Boilers	1 - Trigger complete	T3 Pier 7 roof - permanent M&E services to be fully operational and temporary plant removed (Roof triggered instead of B101 T3 Life Safety System)	N	-
B101 Engineering Asset Replacement - Airbridges, FEGP, PCA	1 - Trigger complete	T3 Airbridge Replacement (including modifications to foundations)	Y	T3 Airbridge Replacement – IFS review complete
B101 Engineering Asset Replacement Electrical Power Infrastructure	1 -Trigger complete	T4 LV Electrical Infrastructure - power on to the replaced final Switchboard	Y	T4 LV Electrical Infrastructure – IFS review complete
B101 Fire Main	N/A	-	Y	Tranches 1 & 3 - IFS review complete
B111 Enabling New Generation of Wide Body Aircraft - Airfield	1 - Trigger complete	Bravo Taxiway Open for Code F Operations	Y	Alpha Bravo taxiways – IFS review complete / Sierra C taxiway IFS review complete / Sierra A taxiway IFS review complete
B411 T5 Additional Fast Track Capacity	1 - Trigger complete	New fast track facility ready for operational readiness	N	-
B451 Commercial Telecon - Cellular 4G Estate	1 -Trigger complete	New Cellular platform available for MNO connection (G5)	N	-
B006 Improved Baggage Capacity and Resilience	1 -Trigger complete	Completion of the conversion of 4 racks to 6 racks in the existing T5 bag store	Y	T5 Early Bag Store – IFS review complete

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Key Projects / Business Cases	Trigger(s)	Trigger Scope	IFS	IFS Scope
B116 T3 Connections Security Capacity	1 - Trigger complete	To deliver a new Permanent Flight Connections Centre to T3 and demolish the Interim Facility on Stand 323	Y	T3 Connections Security Capacity – IFS review complete
B131 CTA & Cargo Tunnels	1 - Trigger defined - project on site	Main Tunnel Life Safety Systems	Y	Main and Cargo Tunnels
B216 Combined Baggage Standard 3 and Asset Replacement	3 - Triggers defined - projects on site	HBS Std 3 machines installed in T2; Proposed % of HBS Std 3 machines installed and in use in T5; HBS Std 3 machines & asset replacement works in T4	Y	HBS & Asset Replacement in T1/2/4; HBS & Asset Replacement in T5
B243 Kilo Apron Development	2 Triggers: complete	Delivery of Stands 211, 212 and 213 into operational use; Completion of the project - delivery of the final stand (of 4) into operational use	Y	Formerly B098 Kilo taxilane and stands 234/5. B311 Enabling New Generation of Wide Body Aircraft - T1 Opportunity Stands. The IFS have completed their review on B311 scope.
B033 (B7113) Additional Fuel Infrastructure	1 - project pre G3	To be defined	Y	Additional fuel storage on Stand 596 & Enabling works for new stand 574
B035 Aircraft De-Icing Infrastructure & Process	1 - project pre G3	To be defined	N	-
B097 T1 Baggage Resilience	1 - Trigger complete	Central Out of Gauge, Resilience and Recovery	Y	Central Out of Gauge, Resilience and Recovery
B112 Airfield Efficiency and Resilience	1 - project pre G3	To be defined	N	-
B317 T4 Infrastructure Improvement - HV and Arrivals	1 - project pre G3	To be defined	N	-
B329 Automation of the Passenger Journey	1 - project pre G3	To be defined	Y	Now at Programme level, previously T2 and T5 Self Boarding Gates; T2, T3 and T5 Self Bag Drop.
B037 Airline Moves	N/A	-	Y	Review of El Al T4 move G3 cost only – IFS Completed review

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Key Projects / Business Cases	Trigger(s)	Trigger Scope	IFS	IFS Scope
B101 Engineering Asset Replacement - Life Safety Systems	N/A	-	Y	T3 Life Safety Systems – IFS review complete
B103 IT Asset Replacement	N/A	-	Y	Data Centre – IFS review complete; Radio Network – IFS review complete; Radio Coverage – IFS review ongoing
B238 Western Baggage Upgrade	N/A	-	Y	WBU IFS Review complete
B030 T1 Closure	N/A	-	N	-
B150 Terminal 2 Phase 1 Completion	N/A	-	N	-
B312 Airfield Efficiency and Resilience	N/A	-	N	-
B316 - T3 Refurbishment and Enhancement - Facades, IDL, and Arrivals Concourse	N/A	-	N	-

* B154 has been removed as the BC has been renamed during Q6 to provide initial budget for the new Heathrow additional capacity programme.

Heathrow short-term plan

Key Projects / Business Cases	Trigger(s)	Trigger Scope	IFS	IFS Scope
B6363 WC IT Infrastructure Replacement	N/A	-	Y	PT5 TBS Tunnel and T5
B6614 T2 Retail Optimisation	1 - project pre G3	To be defined	Y	Scope reviewed in 2019 and no longer a key project or IFS deployed
B6618 Car Park Optimisation and Consolidation	1 - project pre G3	To be defined	Y	Car Park E2 valet parking solution
B6313 Baggage Asset End of Life Management2	N/A	-		B6313.01/02/03 -scope in T1/2
B7509 Magenta	1 - project pre G3	To be defined	Y	Enterprise solution for back office business processes
B7611 Commercial Digital Transformation	N/A	-	N	-
B6641 Care T3 Arrivals Level Transfer	1 - project pre G3	To be defined	N	-
B7675 Regulated Campus Security	1 - project pre G3	To be defined	N	-
B6675 Regulated Terminal Security	1 - project pre G3	To be defined	N	-
B7677 SQR Harmonisation	1 - project pre G3	To be defined	N	-
B6201 T4 Fire Safety Improvements	N/A	-	N	-
B7205 T3 Service Subways	N/A	-	N	-
B6119 Tower Transformation	1 - project pre G3	To be defined	Y	Review of Virtual Control Facility
B6402 Future T2	1 - project pre G3	To be defined	Y	The Programme Management and Programme Management Assessment Criteria (PMAC)
B7501 Cyber Plus Phase 3	1 - project pre G3	To be defined	Y	Strategic remediation
B7621 MSCP4 Long Term Strategy	1 - project pre G3	To be defined	N	-
B7649 Automating Passenger Journey	N/A	-	N	-
B6401 Heathrow Additional Capacity	1 - project pre G3	To be defined	Y	The Programme Management and Programme Management Assessment Criteria (PMAC), and 8 Key Projects

Heathrow short-term plan

4.6 Portfolio concept list

A number of new ideas have been identified since the start of Q6 for consideration by the Capital Portfolio Board. This process has now been extended to include the progressive development of the enlarged portfolio to include the 2019-21 period. A number of new business cases have been introduced into the plan during 2019 based on the benefits they would deliver. These are listed in the previous chapters with new investments for the 2019-21 period listed with B7XXX numbers. The future portfolio pipeline has also been further developed with the airline community as we continue to develop the H7 portfolio.

4.7 Development and Core Capex, and relationship to airport charges

The CAA's settlement for 2019 included an allowance for capex of £665m (2019 prices). At the time of setting 2020 Aeronautical charges Heathrow anticipated a value of £638m development and core capex for 2019, which was more than the settlement. The difference was adjusted through 2020 Aeronautical charges. The actual development and core capex value for 2019 was £623m. The difference will be incorporated in the Aeronautical charges for 2021.

The cumulative value of Core capital approved by the Capital Portfolio Board by the end of 2019 was £3.3bn.

Heathrow short-term plan

4.8 iH7 portfolio, programme and project process

This methodology recognises that the Portfolio is a balance between strategic benefits, the resources invested, and the business risks. The objectives of the Portfolio are fully aligned to Heathrow's four priorities – passenger experience; Hub capacity and resilience; efficient airline operations and total cost of operation.

While the emphasis has switched in 2016 from Portfolio Definition to Portfolio Delivery, the Portfolio is still reviewed on a regular basis, to ensure the Portfolio is optimised. New ideas and concepts can be introduced in this manner, as well as capturing changes in the existing base plan.

The iH7 portfolio comprises of business cases aligned to the four priorities. These have been allocated to Heathrow's Strategic Programmes.

Programmes provide the structural framework to ensure that the business cases are delivered within defined time, cost and quality parameters. Also, they deliver the outputs required to enable the Programme to deliver its agreed outcome and benefits for passengers and airlines.
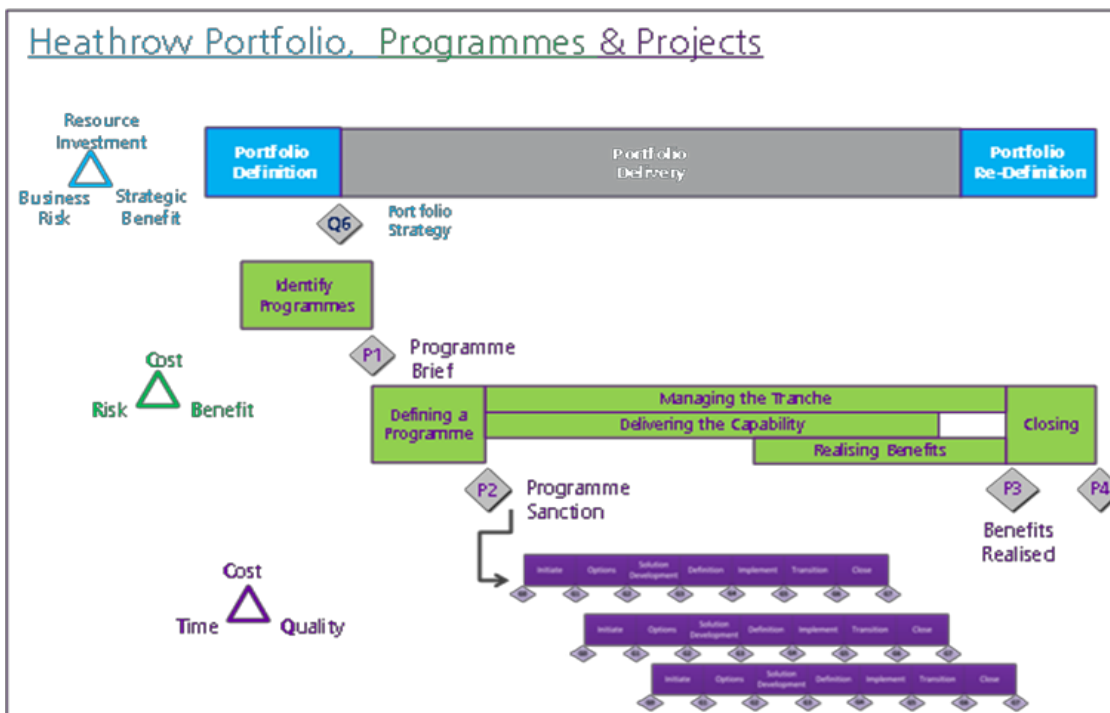

Figure 4.1 Heathrow Portfolio, Programme & Project Process

Heathrow short-term plan

The Heathrow Capital Investment Portfolio is delivered using best practise methodology which is adopted to the Heathrow ways of working. In Q6 and iH7, the "Association for Project Management" (APM) methodology has been used as the basis to the Heathrow Gateway Lifecycle (HGL). The HGL describes the way that projects are delivered at Heathrow.

In 2019, a Programme Lifecycle was developed in order to describe the way that Programmes are delivered at Heathrow. The Programme Lifecycle has been based on the "Managing Successful Programmes" (MSP) methodology. The Programme Lifecycle is under trial in the two new iH7 Pathfinder programmes: Heathrow Additional Capacity and Future T2.

The Programme Gateway Lifecycle is designed to work with the established Project Gateway Lifecycle as components of the overall Heathrow Gateway Lifecycle (HGL) (figure 4. 2.). Programmes are managed using Programme Tranches (lists of projects that deliver outputs). The projects in the Programme all follow the Heathrow Project Lifecycle and go through the project Gateways, G2-G8. G0 strategic assessment and G1 initiate takes place as part of the Programme Definition stage.
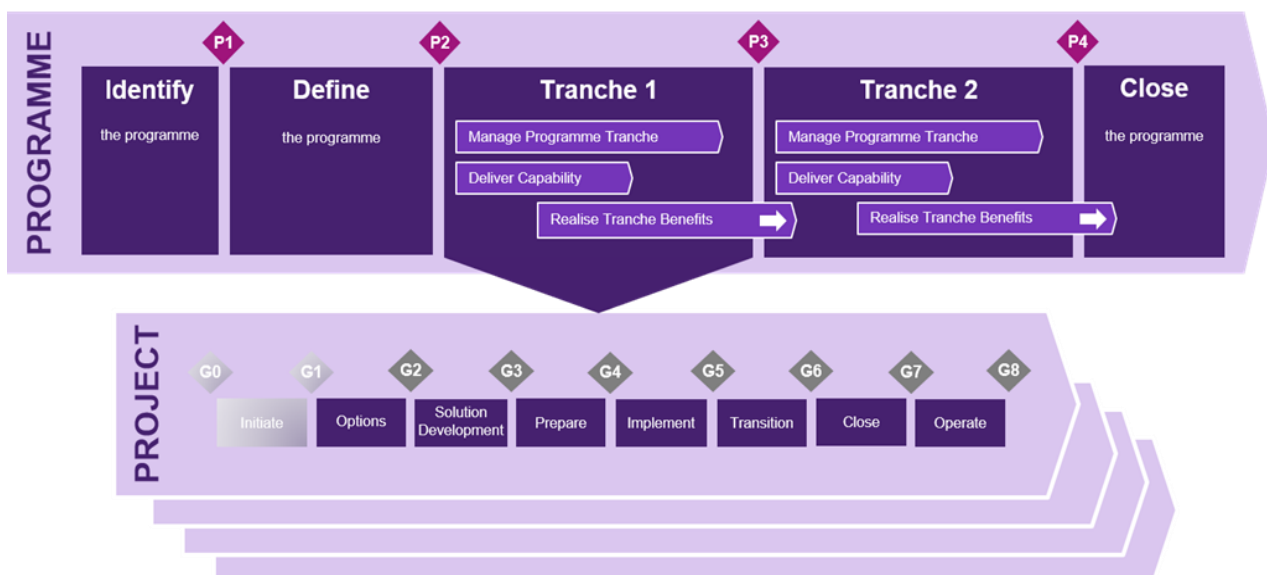
Looking forward to 2020, Heathrow continue to implement and utilise the Programme Lifecycle process on the two pathfinder programmes and plan to rollout further across the portfolio.

The IFS has developed a Programme Management Assessment Criteria (PMAC) which is based upon the Heathrow Programme lifecycle and will be used to assess the pathfinder Programmes against the Programme Lifecycle.
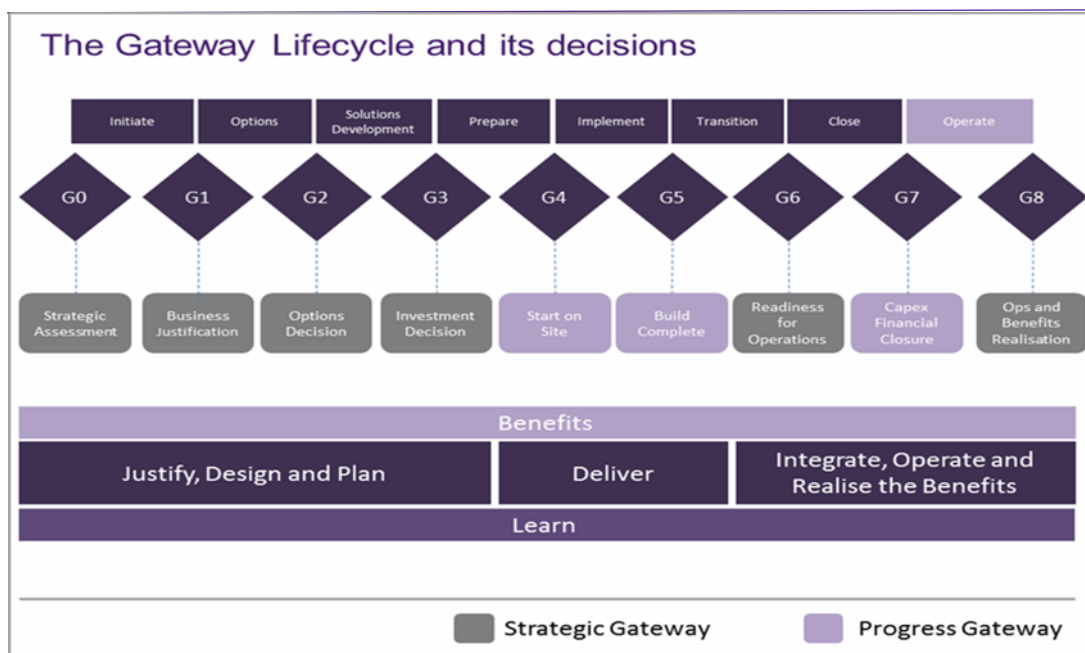
Heathrow short-term plan

Figure 4.2 Heathrow Gateway Lifecycle

Gateway 0 to Gateway 3 is known as the Development Stage. Development Capital Expenditure (Capex) projects will have a lower definition of scope, schedule, risk and cost than Core Capex projects (post Gateway 3) and may not necessarily have a clearly understood method of delivery.

Gateway 3 is the critical investment decision point, as at this point in the lifecycle, it may be jointly agreed between Heathrow and the Airline Community for the Business Case not to go ahead, as there now may not be a requirement for the investment. In this scenario, any investment money not spent may either be given back to the Airline Community via a rebate, or, the money may be spent on a new Business Case.

In addition;

- It is the transition point at which Capex passes from Development to Core, via the Capital Portfolio Board

- It is the point of transition where the Business Case goes from the Programme, into Delivery. For this to take place there should be confidence in the schedule, cost and risks prior to awarding a contract to the Delivery Integrator

- It is the point at which Regulatory Triggers are set (if required).

Heathrow medium-term plan

5   Heathrow medium-term plan

5.1   H7 Portfolio

Using current CAA timelines, the initial H7 Business Plan (IBP) for the 2022-2026 period was submitted at the end of 2019.

5.2   Heathrow's traffic forecast

Ensuring an accurate forecast is hugely important and benefits the whole Heathrow community, enabling businesses to plan their activities and tailor their resources in accordance with the expected demand.

5.2.1 Settlement traffic forecast

The table below shows the CAA's Q6 forecast of 347.7 million passengers, using the econometric model.

Reg. Year	Total (Millions)	Short Haul (Millions)	Long Haul (Millions)	Q6 Total (Millions)
2014 (Apr - Dec)	55.4	27.0	28.4	
2015	72.0	34.9	37.1	
2016	72.7	34.9	37.8	347.7
2017	73.4	35.0	38.4	
2018	74.2	35.1	39.1	

Table: Passenger forecast (millions) based on CAA's Q6 Settlement

Heathrow's current traffic forecast

The table below shows Heathrow's the actual traffic outturn for the years 2014 to 2019

Reg. Year	Total (Millions)	Q6 + 2019 Extension Year (Millions)
2014 (Apr - Dec)	57.3	
2015	75.0	
2016	75.7	
2017	78.0	447.0
2018	80.1	
2019	80.9	

*2014, 2015, 2016, 2017, 2018 and 2019 are actuals

Table: Heathrow's current passenger forecast (millions)

The passenger traffic for the Regulatory year 1st January 2018 - 31st December 2018 was 80.1 million passengers. The actual passenger traffic for the original Q6 period was 366.1 million, 18.4 million higher than forecast.

A traffic forecast for 2020 has not been provided, as at the time of updating this table there was uncertainty of the impacts from COVID-19.

Our latest forecast has recently been made available in our Investor Report via
https://www.heathrow.com/company/investor-centre/reports/investor-reports

Heathrow medium-term plan

5.2.2 Risks and assumptions

Risks

Our forecast values come with some risks; aviation is a cyclical industry, exposed to both the overall business cycle and aviation-specific events. The key assets, namely aircraft, are mobile and deployed in a global context for Heathrow's airlines.

We have reflected this uncertainty in the numbers discussed above. However, this does not account for dramatic changes to core assumptions. These might include:

- Fleet upgrade plans - most of the growth from airline fleet upgrades.

- Economic crises – our forecasts are occurring at a time of great uncertainty in the world economy, and the potential impact of Brexit/COVID-19 is still unknown. Growth assumptions and the stability of growth cannot be assumed, with impacts on demand and airline investment decisions.

- Fares - oil price and carbon impacts on fares have the potential to diverge dramatically from what currently appears to be a reasonable range. This can be seen in historical in the oil price.

- Security - forecasts are at risk from major changes in the overall level of security in global aviation and security screening rules.

Assumptions

Airport capacity constraints

This plan assumes that the annual cap of 480,000 ATMs at Heathrow will continue throughout the regulatory period and beyond, that any use of tactical measures will not lead to an increase in capacity, but rather improves resilience of the airport.

Heathrow medium-term plan

5.3   Asset Disposals

The Capital Investment Protocol requires that any asset disposals in the current regulatory period are included in the Strategic Capital Business Plan.

No such asset disposals are currently planned. However, long term leases are being utilised for the development of hotels. The commercial structure for these deals is typically that Heathrow grants a long ground lease of up to 150 years to a third party developer or operator, who funds and operates the hotel. The ground leases would be structured to provide for annual ground rent payments to Heathrow, channelled through the single till.

We have completed such contracts on sites at T2 & T4 with the Arora Group. They operate both hotels – with T4 offering c750 rooms (split between Holiday Inn Express and Crowne Plaza brands) and T2 offering 360 rooms (under Hilton Garden Inn brand). The T4 hotel opened in October 2018 and the T2 Hotel opened in July 2019. On both projects, the Heathrow enabling works (site clearance and service provision) are being undertaken at the developer's cost.

Figure 5.3.1 T4 Hotel

Figure 5.3.2 T2 Hotel

Heathrow medium-term plan

5.4 Heathrow 2.0 – Our plan for sustainable growth

Our plan for sustainable growth - Heathrow 2.0 - was launched in February 2017. Heathrow 2.0 is our strategy for sustainability leadership that takes us beyond simply reducing negative impacts to delivering positive impact in a way that enables others to thrive as we grow. It sets out a series of goals that will guide the future of our business. We will continue to engage our stakeholders as we roll out Heathrow 2.0, evolving our strategy as we will gain more input and better insight into solving our challenges.

We've structured Heathrow 2.0 around four key outcomes and stakeholder groups:

- A Great Place to Work is about helping our people fulfil their potential

- A Great Place to Live is about working better with our neighbours to improve their quality of life

- A Thriving Sustainable Economy focuses on creating opportunities for business (including SMEs and sustainable business) to deliver a stronger future for the UK

- A World Worth Travelling is all about working with our industry and regulator to deliver fair and sustainable air travel for future generations to enjoy.

Notwithstanding the significant challenges currently faced as a consequence of COVID-19, we maintain our long-term strategic ambition for growth and decarbonising aviation will remain the single greatest challenge facing society and our industry over the medium and long term. We therefore maintain our focus on decarbonisation and to aligning the airport and sector to the goals of the Paris Agreement on Climate Change. In line with the recommendation of the Committee on Climate Change, we continue to advocate for the Government to include aviation within the UK's target net zero carbon emissions by 2050.

We have commenced the switch over to a more sustainable green gas supply, which will help to stimulate growth for this important commodity. In addition, we have further invested in UK natural climate solutions such as woodland creation in Scotland. This is to capture carbon associated with future years' emissions, as part of our journey to net zero.

We have also continued to deliver against our Heathrow 2.0 sustainability strategy. In February we published our latest Gender Pay Gap report, detailing progress made and our gap as better than the national average. However, there is more to do to improve both female and Black, Asian and Minority Ethnic ('BAME') representation in more senior roles, which has been taken into account as part of the organisational redesign we are working through.

Heathrow long-term plan

6 Heathrow long-term plan

6.1 Heathrow Expansion

On 27 February, the Court of Appeal concluded that the Government was required but failed to take account the Paris Climate Agreement when preparing the Airports National Policy Statement ('ANPS'). The Court declared that the ANPS has no legal effect unless and until the Government carries out a review of the policy.

The Government declined to appeal to the Supreme Court directly. Heathrow and other interested parties applied for permission to appeal the Court of Appeal ruling, which the Supreme Court has now given permission for the appeal to go ahead.

Heathrow has already taken a lead in getting the UK aviation sector to commit to a plan to get to Net Zero emissions by 2050, in line with the Paris Agreement, and we are ready to work with Government to achieve this. Expanding Heathrow remains a key plank of our long-term strategy once we have beaten COVID-19 and entered the recovery phase. However, given the current COVID-19 crisis and the ongoing appeals process, we expect expansion and related capital investment to be delayed by at least two years.

Heathrow long-term plan

6.2 Key Regulatory Developments

In December 2019 we submitted our Initial Business Plan ('IBP') to the CAA. The IBP included our proposals for the regulatory framework for the H7 price control period ('H7'), due to begin on 1 January 2022. In light of the Court of Appeal ruling setting aside the ANPS, we plan to provide an updated initial forecast of the regulatory building blocks and potential resulting price paths in coming months.

The CAA also continues to progress its thinking on the regulatory framework for H7 with its latest consultation published in April 2020. The document provides an update on the H7 timetable, confirming the need for Heathrow to submit a final or revised business plan ('RBP') in Autumn 2020 to establish the H7 price control in 2022. It also notes the impact of COVID-19 and the need to review how uncertainty can be managed through Heathrow's regulatory framework. The CAA will be publishing a further consultation document in June 2020.

The current COVID-19 crisis is a further example that demonstrates that existing regulation has failed to create a long-term balance between risks and reward given the asymmetric risks faced by Heathrow. This failure threatens the sustainability of investment for consumers. We will continue engaging with the CAA to ensure it creates a fair framework that drives the right incentives for investment for the benefit of consumers and delivers on CAA's duties on finance ability in the context of H7.

We will continue to collect feedback on our IBP from our airline partners and other key stakeholders through Summer 2020. This feedback will be reflected in our RBP. The CAA will use our RBP to inform their assumptions for setting the price path for the H7 price control.

Finally, in March we submitted our response to the CAA's consultation on the early design and construction costs associated with expanding Heathrow - category B and early category C costs. We expressed our concerns that some proposals do not represent a balanced set of incentives needed for investment. We have also requested that in light of the Court of Appeal judgment, the CAA confirms its policy on the treatment of these categories of spend incurred to date. We are expecting the CAA to provide an update on the treatment of these costs in Q2 2020.

Appendix

7. Appendix – Equitable treatment metrics

Comparison of facilities by terminal
The table below sets out metrics related to facilities to allow airlines to make comparisons. Any potential investment decision to make facilities more equitable must also be subject to the usual business case test; including business benefits, financial appraisal, asset life, masterplan progress, cash constraints and agreed investment profiles.

			Measurement	Definition	Terminal 2	Terminal 3	Terminal 4	Terminal 5	Notes
1.0	**Traffic**	1.1	MPPA	Million Passengers Per Annum (MPPA) - defined as quantum of total passengers served in each terminal per annum. Calculation based on an annual terminal throughput for last calendar year	18.9	20.1	9.0	32.9	Data from HDS 2019 - General Aviation excluded (Flight types 1,3 used), rounded to 0.1m
		1.2	ATMPA	Air Traffic Movements (ATMs) per annum - defined as quantum of aircraft movements in each terminal per annum. Calculation based on air traffic movements in each terminal for last calendar year	121,315	94,627	48,511	208,779	Data from HDS 2019 - General Aviation excluded (Flight types 1,3 used).
		1.3	Peak hour departing flow - all pax	Peak Hour Passengers - number of passengers (including transfer passengers) served in each terminal counted as 30th peak hour (clock hour) of the last calendar year	2,909 (ATD) 2,648 (STD)	3,434 (ATD) 3,320 (STD)	2,089 (ATD) 1,860 (STD)	4,762 (ATD) 4,576 (STD)	Data from HDS 2019 - General Aviation excluded (Flight types 1,3 used). Stand On/Off time used as ATD.

Appendix

			Measurement	Definition	Terminal 2	Terminal 3	Terminal 4	Terminal 5	Notes
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.	297,900	225,780	132,400	526,000	Rounded to nearest 100m2. T2A & T2B (walkway included). T5 includes T5A, B & C
3.0	**Passenger Infrastructure**	3.1	Number of check-in desks & bag drops	For each terminal sum of all check-in desks and bag drops which have connection to baggage system.	116	193	129	142	Based on S19 check in desk declared capacity for T2, T3 and T4. T4 includes x2 out of gauge desks. Note T3 desks will vary throughout the year due to Self-Service Bag Drop installations
		3.2	Number of self-service kiosks	For each terminal sum of all self-service units (either check-in or transfer)	91	133	76	89	
		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.	31	29	19	37	
		3.4	Number of ticket desks (total existing)		44	58	44	26	Excludes 'Check in desks' that are being used as 'Ticketing/Assistance/Upgrade desks'. Counts individual serving positions (landside only). T4 includes untenanted ticket desks.

Appendix

			Measurement	Definition	Terminal 2	Terminal 3	Terminal 4	Terminal 5	Notes
3.0	**Passenger Infrastructure**	3.5	Number of immigration lanes + + eGates	For each terminal sum of all immigration lanes and e-Gates (arrivals and transfer) which are used for passenger processing.	57	54	48	68	Three desks lost in T3 as part of the facial gate expansion programme.
		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	60mins	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.	915	855	730	450	Rounded to nearest 5m. T5 includes TTS in calculation.
		3.8	Number of CIP Lounges available (total)		8	11	8	6	These numbers include the actuals / demand for both airline and independent lounges in departures and arrivals. The lounges in demand numbers include lounges that are currently under construction but have yet to open.
		3.9	Number of CIP Lounges requested		0	2	1	0	

Appendix

			Measurement	Definition	Terminal 2	Terminal 3	Terminal 4	Terminal 5	Notes
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.	686	699	712	792	
		4.2	Number of MUPs	Number of MUPs (make-up) positions in each baggage hall (both departures and transfer)	207	142	129	345	Only currently usable MUPs have been included, T2 uses T1 facilities and excludes T2B
		4.3	ADP (avg time to input belt - arrivals)	Arrivals Delivery Performance for local baggage - percentage of flights delivered from chocks to docks within: 35 mins for small-size aircrafts, 45 mins for medium and 50 mins for large & A380s	LB ADP 85%	LB ADP 87%	LB ADP 79%	LB ADP 73%	Figures are 2019 actual performance metrics
		4.4	ADP (avg time to input belt - transfers)	Arrivals Delivery Performance for Short Connect Transfer baggage – percentage of bags with 2 hours or less to connect delivered within 25mins chocks to docks	84% in 25mins	69% in 25mins	65% in 25mins	57% in 25mins	Figures are 2019 actual performance metrics
5.0	**Aircraft Infrastructure**	5.1	Number of aircraft stands (centrelines)	For each terminal / campus sum of aircraft stands (both contact and remote) which are adjacent to terminal / campus area. MARS'ed (Multi Aircraft Ramp System) stands should be counted as one large stand	35	45	34	63	Declared physical stand supply for Summer 2020
		5.2	Number of pier served aircraft stands (centrelines)	For each terminal / pier / satellite sum of aircraft stands which are contact / pier served. MARS'ed (Multi Aircraft Ramp System) stands should be counted as one large stand.	26	28	21	45	Physical stand supply for Summer 2020

Appendix

			Measurement	Definition	Terminal 2	Terminal 3	Terminal 4	Terminal 5	Notes
6.0	**Terminal access**	6.1	Number of car park spaces	Number of car park spaces in a car park which is adjacent and linked to each terminal.	1,420	1,536	849	3,510	Note these spaces may vary across the year due to development works
		6.2	Walking distance (m) to check-in area from underground	For each terminal unaided walking distance from the platform to the closest entrance to the terminal building. All aids such as sidewalks, elevators, escalators, people mover systems are excluded. Distance for each terminal should be presented on drawings.	565	405	45	140	Rounded to nearest 5m
		6.3	Walking distance (m) to check-in area from HEX	For each terminal unaided walking distance from the platform to the closest entrance to the terminal building. All aids such as sidewalks, elevators, escalators, people mover systems are excluded. Distance for each terminal should be presented on drawings	310	185	120	80	Rounded to nearest 5m
		6.4	Walking distance (m) to check-in area from public bus	For each terminal unaided walking distance from a bus stop to the closest entrance to the terminal building. All aids such as sidewalks, elevators, escalators, people mover systems are excluded. Distance for each terminal should be presented on drawings.	370	500	125	165	Rounded to nearest 5m

Heathrow