YOUR LONDON AIRPORT Gatwick

Delivery of 95% Pier Service - Tollgate 3

Capital Programme Board – February 2013





Agenda

→ The story so far

→ Delivery of 95% Pier Service (North Terminal) - Requirements

Pier 6 Southern Extension Preferred Option

Do Nothing Scenario

Phased approach to delivery plus scope reduction opportunities and cost



The story so far...

 2009
 2010
 2011
 2012
 2013

Pier 7 stopped

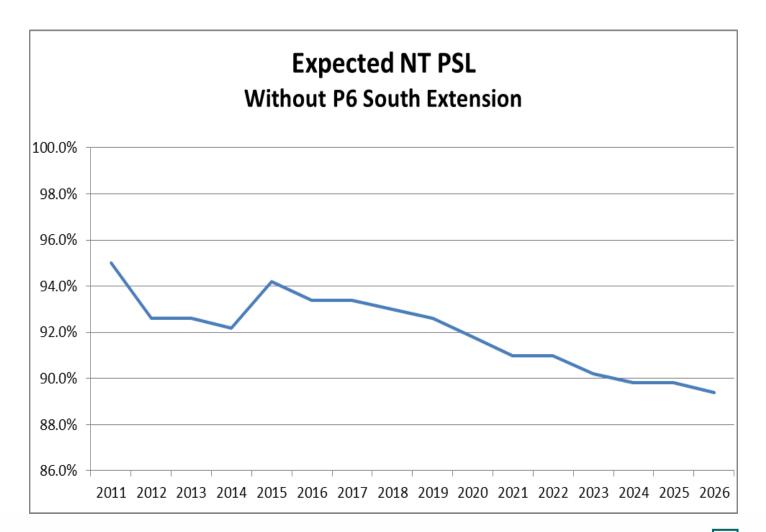
Additional Pier Service Airline Working Groups & CPB/JSG 2011 Viability Study Site Selection April 2012 Business Plan Option Tollgate 2

28 June –
Constructive
Engagement.
Preferred
Option for P6
South
Extension

Revised Business Plan to 2024 Tollgate 3



Delivery of 95% Pier Service (NT)





Requirements agreed at TG2

Project Requirements

- To meet future fleet mix requirements and support different airline operating models
- Passenger experience that allows Gatwick to compete (Premium, Economy, Passengers with Restricted Mobility)
- → CAA compliance (CAP 168)
- Safety Regulation Group (SRG) approved solution
- Solution delivered to Gatwick Airport Limited (GAL) engineering standards
- Delivery to environmental commitments -Section 106 – Decade of Change
- Relocation and re-provision of existing infrastructure within proposed site boundary

Service Proposition Requirements (Product Matrix)

- To meet 95% pier service levels in line with forecasts
- Closed gate rooms to support airline operations and on time performance
- Vertical segregation of arriving and departing passengers
- Comfortable gate room seating
- Space not less than IATA C
- Sufficient Toilet facilities
- Lift locations to facilitate PRM access
- Retail and vending offers consistent with passenger requirements



Site Selection

- Level 1 QFD assessed the potential site options against agreed criteria:
 - Capacity
 - → Cost
 - Service
- An extension to the South of the existing Pier 6 was agreed as the preferred location for additional pier service.





Options Development Process

- → QFD Level 2
 - →31 Requirement Criteria identified
 - → Cross functional input
 - → Data populated through Concept Design
- Criteria categorised under:
 - → Capacity
 - → Cost
 - → Service (Experience)
 - → Service (Performance)

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Do Nothing

- Asset database outlines all pavement / AGL / other assets due for replacement
- → Cost of asset replacement to 2020 in the Pier 6 South site area, if Pier 6 Southern Extension were not built, would be circa £29.5m

Asset Reference / Maximo Numb	(includes grid	Use	Business Unit / Asset Stewar	Assessment Type 🔻	Date of Assess	Last Inspect date	(years) as at	Residual life (years)as 2013	for high level		. area, linear mber etc.)	refurbish / replace pe	Economic Service Life Asset (year	maintenance Regime based o
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			Airfield	Predictive	28/02/2012			7			m2	0	30	Routine
C158-A	Stand 158 (Cargo Area)	APRON	Airfield	Modelling Predictive	28/02/2012	21/07/2010	8	12	PCC	1,795	m2	0	30	Maintenanc Routine
C158-B	Stand 158 (Cargo Area)	APRON	Airrieid	Modelling	2010212012	21/07/2010	13	" ²	PCC	2.140	me	ľ	30	Maintenanc
			Airfield	Predictive	28/02/2012			10			m2	0	30	Routine
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C3-B	STAND C3 (CARGO A	APRON	Airfield	Modelling Predictive	28/02/2012	07/01/1979		-1	PCC	975	m2	0	30	Refurbishm
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C7-B	STAND C7 (CARGO A	APRON		Modelling		07/01/1979	۰		PCC	975				Refurbishm
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C9-A	STAND C9 (CARGO A	APRON	Airfield	Modelling Predictive	28/02/2012	03/12/1996		-1	PCC	5,530	m2	0	30	Refurbishme Major
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			Airfield	Predictive	28/02/2012			9			m2	0	30	Routine

Option A – April 2012 Business Plan

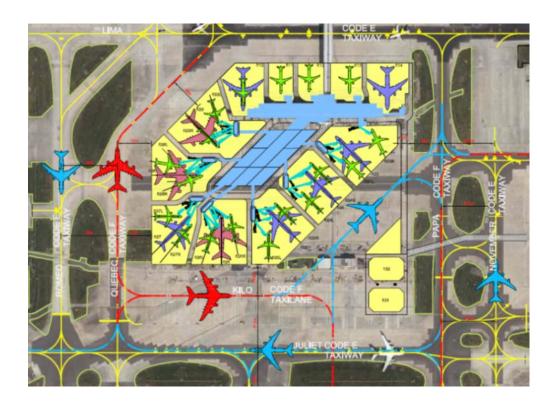
- → circa £160m
- Difficult to operate stands without flexibility to suit all airline operating models
- Poor passenger experience due to link bridge from existing Pier 6
- Insufficient gateroom and circulation space





Option B

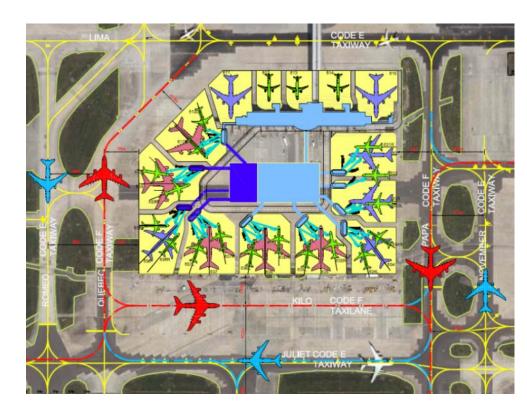
- circa £180m
- NATS driven option to avoid push back onto Papa/November
- Building shape makes for difficult to operate stands in SW corner of site
- Insufficient gateroom and circulation space





Option C

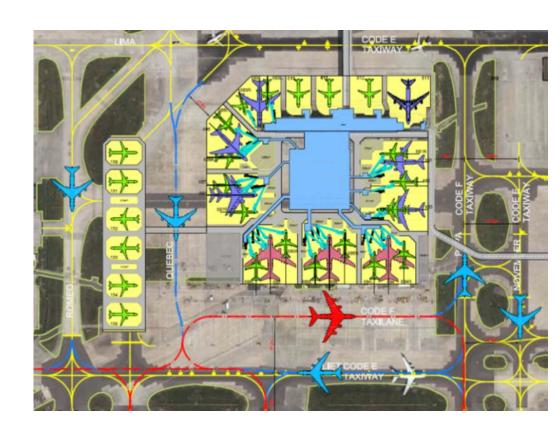
- circa £210m
- Modelling showed that pushback onto Papa/November was not a significant issue
- How many aircraft is it possible to fit on the site?





Option D

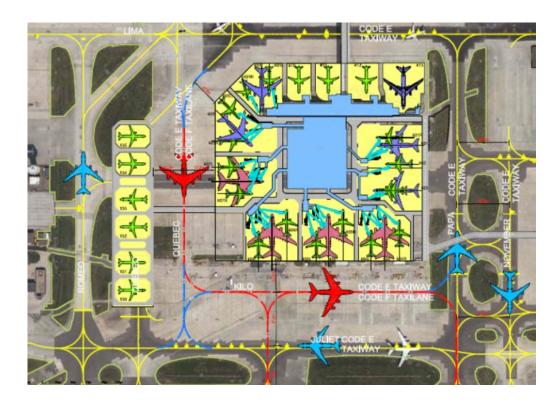
- circa £185m
- Use whole site, but provide sufficient space on stand to satisfy all airline operating models
- Less aircraft, but stands optimised for performance
- Break into Pier 6 façade for optimum passenger experience and circulation space
- Optional Remote / push and hold stands





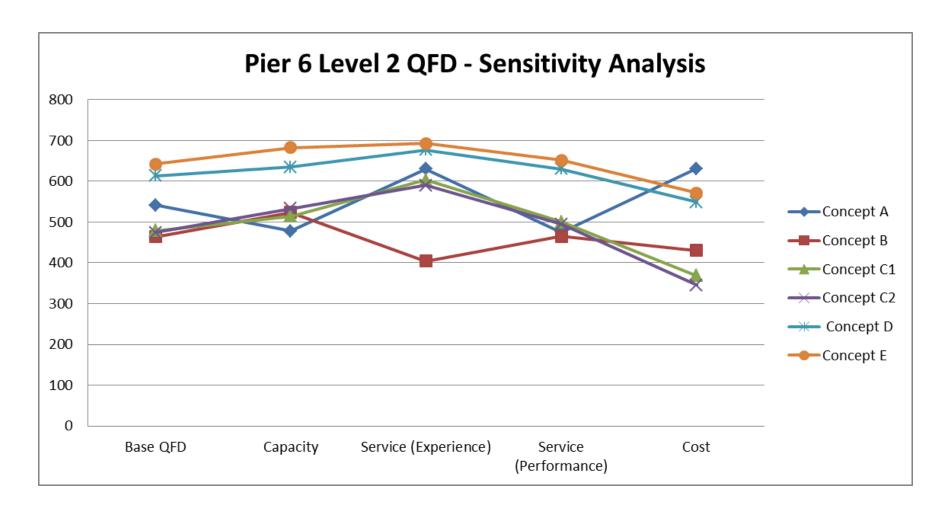
Option E – Revised Business Plan to 2024

- → circa £185m
- As Option D, but reconfiguration to provide space for additional Code F stand





Level 2 QFD Option Selection



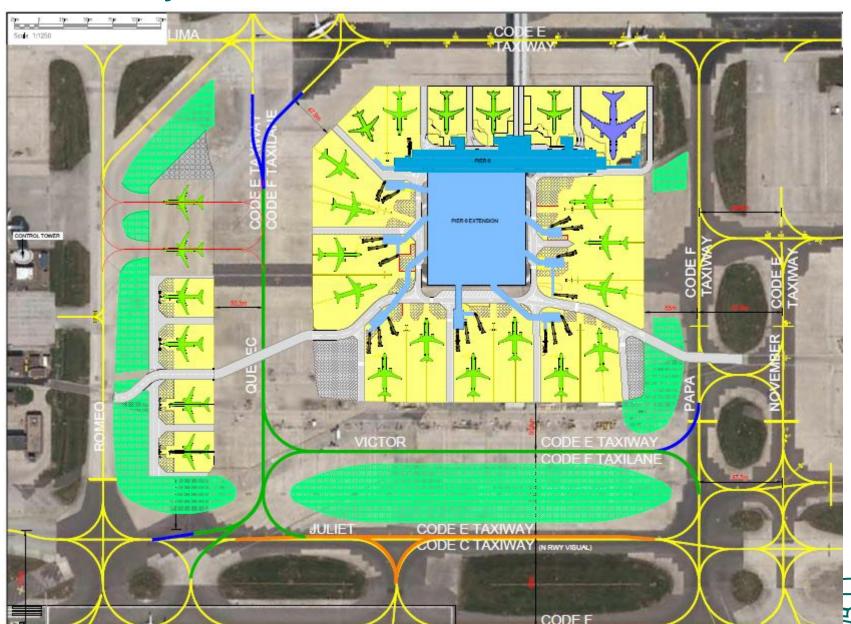


Options Development since April 2012

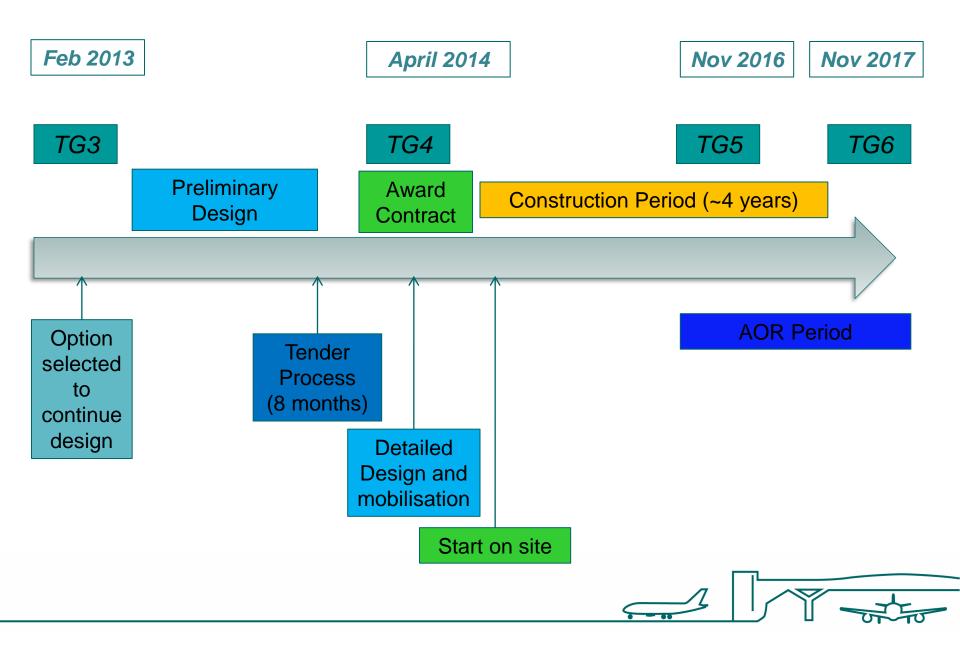
- → Benefits (Option A to Option E):
 - → No stands have operating or stand planning restrictions
 - Building gate space to IATA C, with effective circulation and queuing space for passengers
 - → Operationally efficient stands to assist On Time Performance
 - CIP Lounge product with views across the airfield and direct boarding to long haul stands
 - Stands provide flexible MARs centrelines with safe walking routes and ability to board using rear steps
 - Remote / Push and Hold stands



Site Layout



Pier 6 Southern Extension – Programme



Pier 6 Southern Extension - Financials

Tollgate 3 Option

→ GAL Management £1.96m

→ Design £5.48m

→ (Tender Process £0.53m)

→ (Construction £175.5m)

→ General £0.59m

→ Risk £0.17m

→ Previously approved £6.98m

→ TOTAL REQUEST £1.2m

→ Funds required £8.2m

→ TOTAL AFC £184.2m





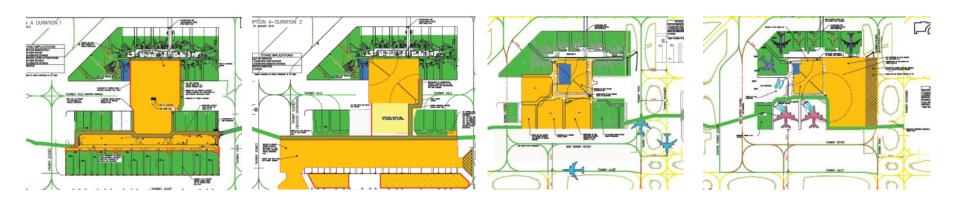
Phased Construction and scope opportunities

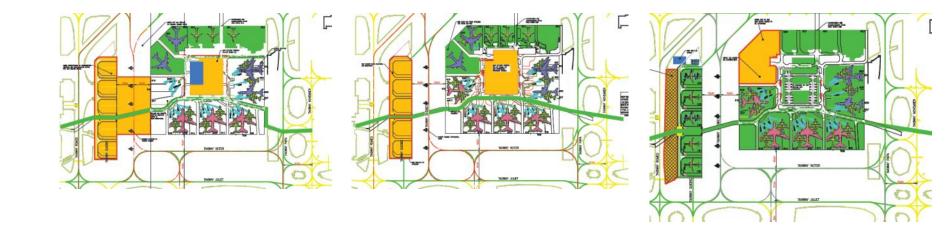
- Construction Sequencing
 - Phased delivery of Remote hold stands and Quebec realignment
 - Phased delivery of Code F capability

- Reduce flexibility of infrastructure (remove independent WIWO access to each Code C)
 - > Removal of one staircase from each node
 - Maintain independent access, one via jetty, one via stairs
 - → Acknowledge change to project requirements



Construction Sequencing

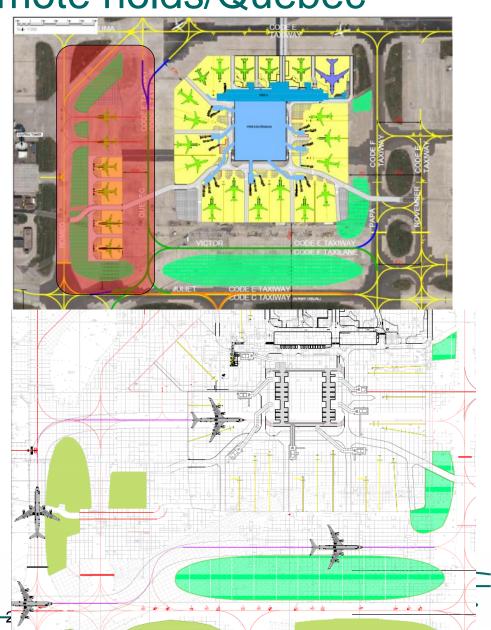






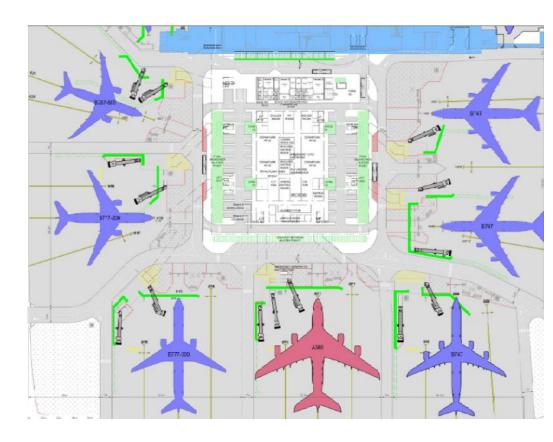
Phased delivery of Remote holds/Quebec

- circa £20m saving before 2020
- Additional £30m+ to remobilise and develop later
- Recommend to develop opportunity post TG3



Phased delivery of Code F stands

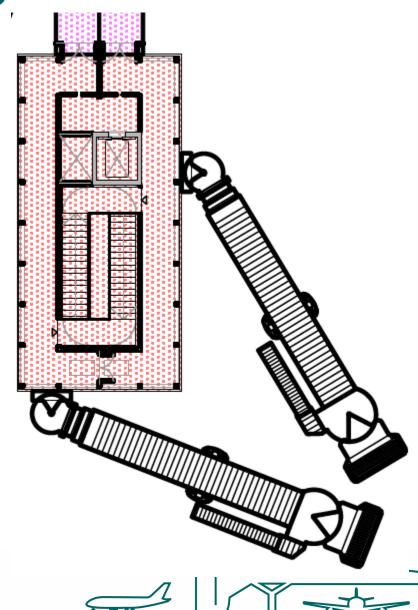
- circa £2m saving before 2020
- Additional costs to remobilise and deliver later
- Recommend to develop opportunity post TG3





Reduce Flexibility - WIWO

- circa £3m saving
- Current design allows for full flexibility for steps to tarmac and airbridge access independently to both Code C centrelines on MARS stands.
- 2 independent sets of stairs in each node
- Reducing this flexibility changes project requirements but presents significant cost savings
- Do not recommend pursuing this opportunity



Summary

Option	Do Nothing	Tollgate 3 (build P6 2014)	Phased approach (P6 2014, Remotes/Quebec 2020)
Beyond Q5	£29.5m	£184.2m	£167
Post 2020	£??	£0	c £35m
Total	£??	£184.2m	c £200m +
Level of Disruption			



Question for CPB

→ Does CPB recommend the approval of Tollgate 3 for the Pier 6 Southern Extension option to deliver 95% Pier Service for North Terminal?



YOUR LONDON AIRPORT

Gatwick

Supporting Information



Pier 6 Southern Extension



Pier 6 Southern Extension



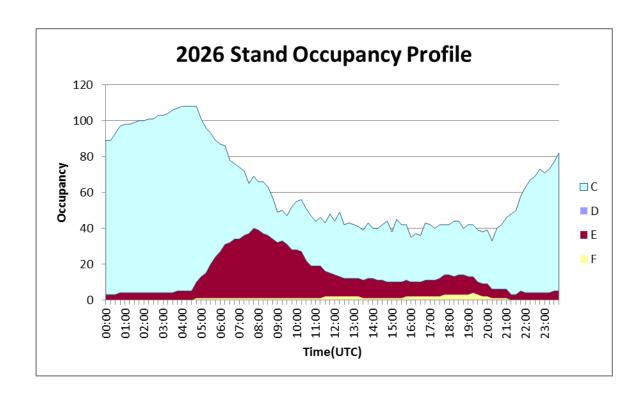


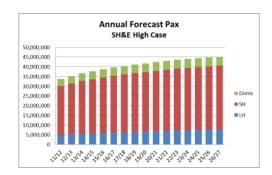
Central Circulation Area

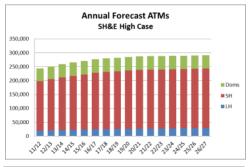


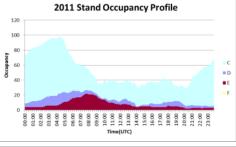
2026 Total Stand Occupancy Profile

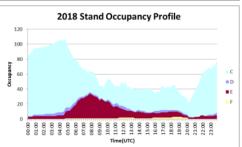
- → Similar short haul peak 2018/2026
- → Long haul growth between 2018 2026







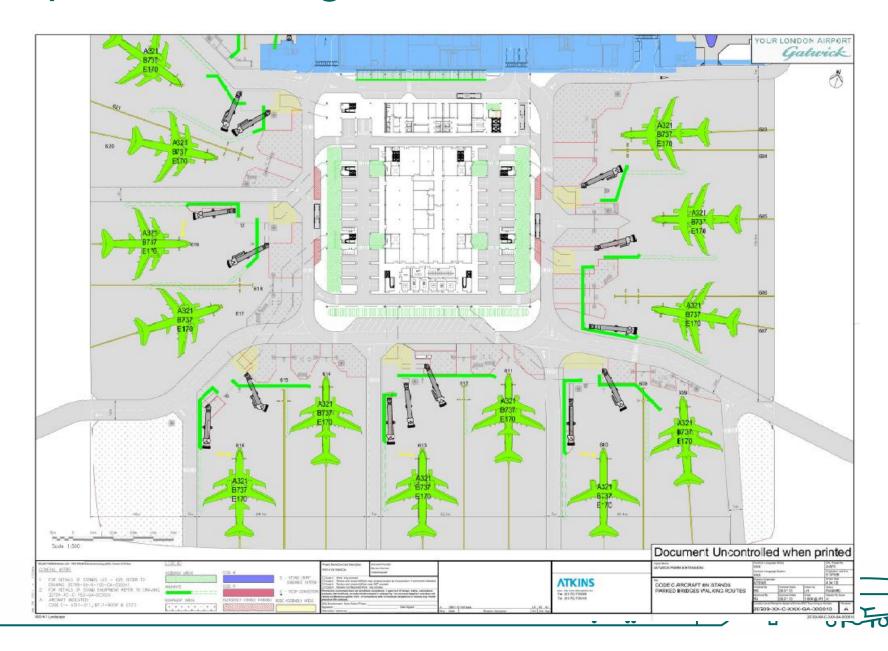




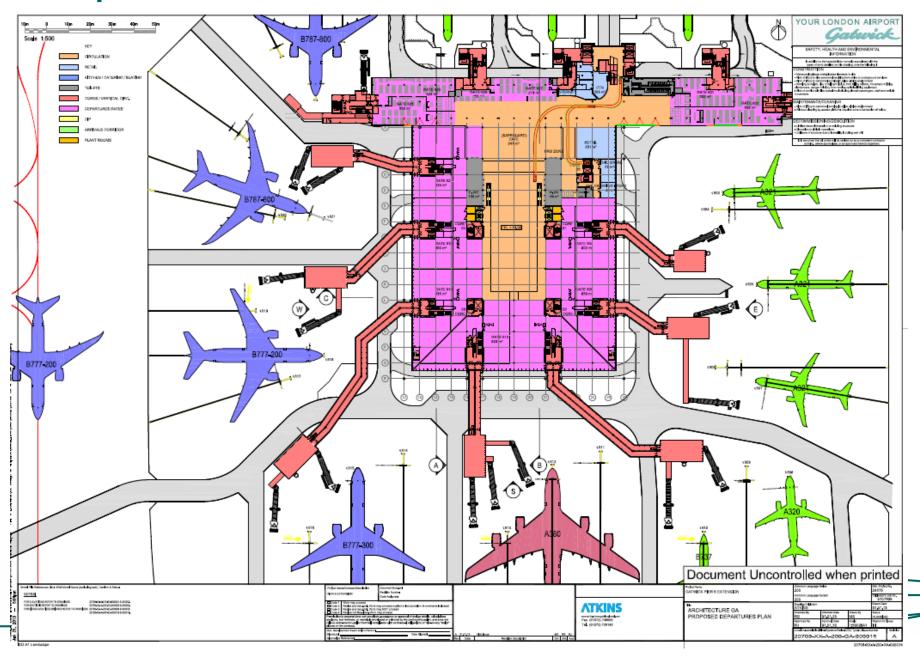




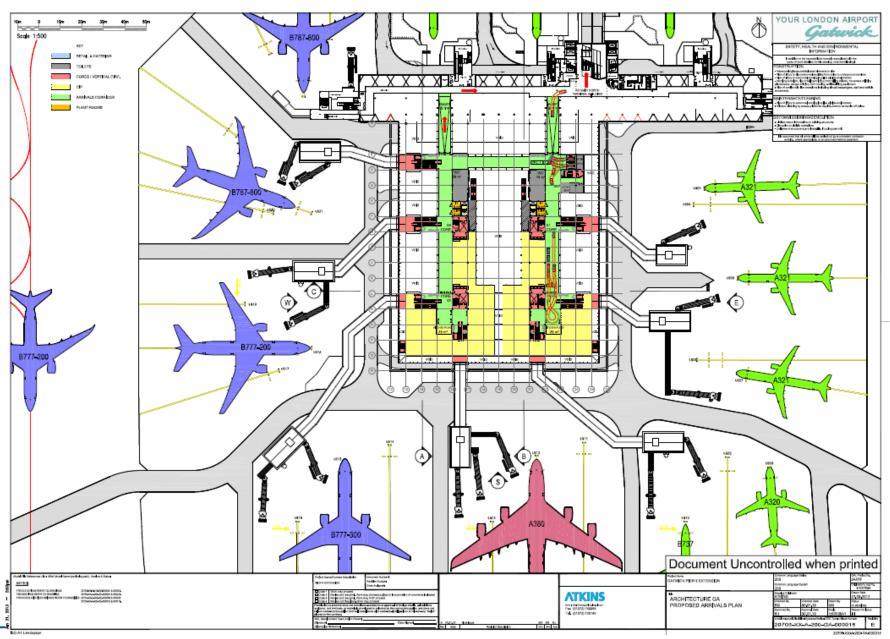
Apron Planning



Departures Level



Arrivals Level



Changes since April 2012 Business Plan - Scope

- → Detail of Additional Scope (Option A to Option E):
 - → Full break in to Pier 6 façade (previously narrow link bridge)
 - → 17,270 m2 building (previously 15,472 m2)
 - → 175,000 m2 pavement (previously 138,500 m2)
 - → Two CIP Lounges of 10,000 sq ft with direct access to aircraft
 - Alternative enhanced Remote Stands solution
 - Space safeguarded for an additional 4 No. Code F stand (one to be built – re-provision of 110)



Gateroom and space planning

IATA Level of Service A - up to 40% occupancy

→ An Excellent level of service. Conditions of free flow, no delays and excellent levels of comfort.

IATA Level of Service B - up to 50% occupancy

→ High levels of service. Conditions of stable flow, very few delays and high levels of comfort.

IATA Level of Service C - up to 65% occupancy

Good level of service. Conditions of stable flow, acceptable delays and good levels of comfort.

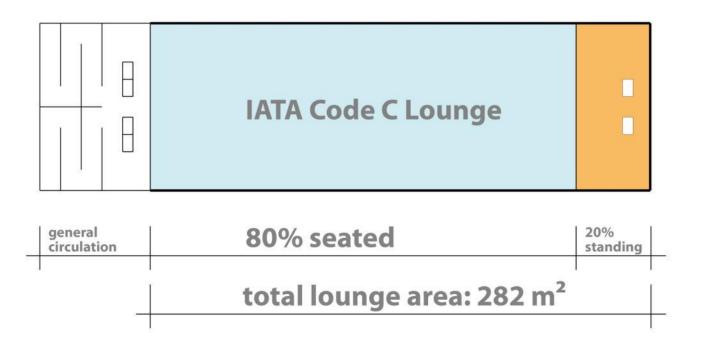
IATA Level of Service D - up to 80% occupancy

→ Adequate level of service. Conditions of unstable flow, acceptable delays for short periods of time and adequate levels of comfort.

IATA Level of Service E - up to 95% occupancy

→ Inadequate level of service. Conditions of unstable flow, unacceptable delays and inadequate levels of comfort.

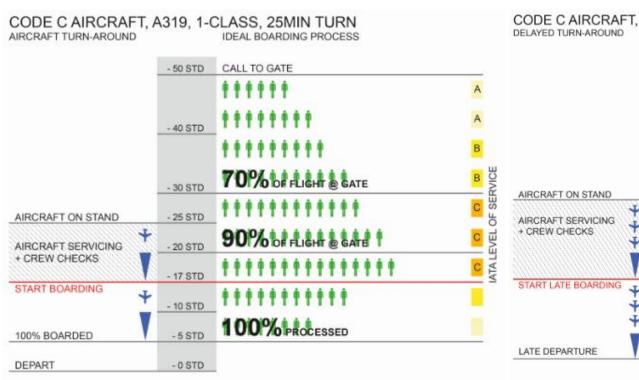




* Code C based on A321, 1-class, 220 seats

220 pax x 80% loadfactor = 176 x 20% standing = 35.2 pax x 1.2 m²/p = 42 m² 176 x 80% seated = 140.8 pax x 1.7 m²/p = 240 m² 282 m²

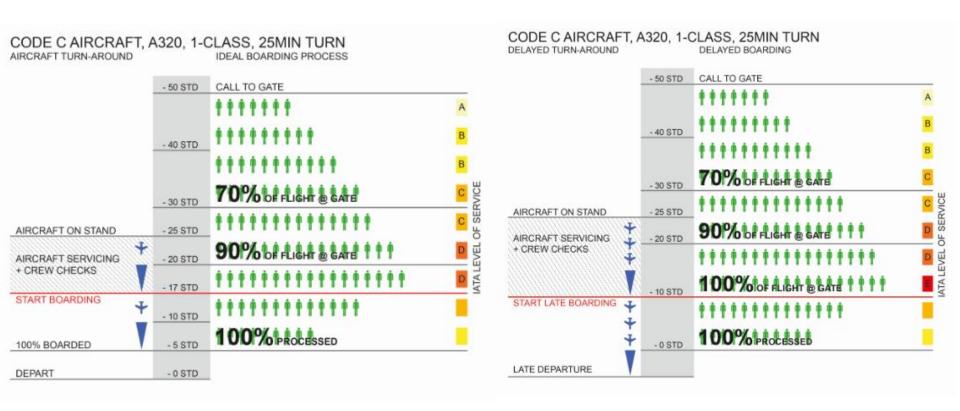
Gateroom planning – Code C



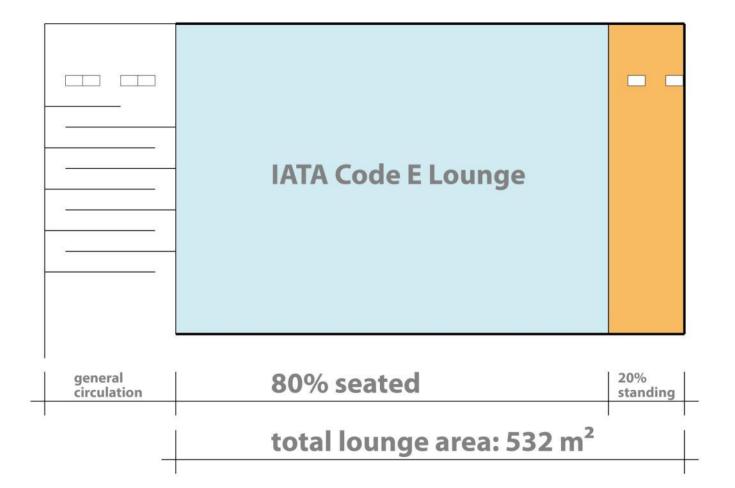




Gateroom planning – Code C



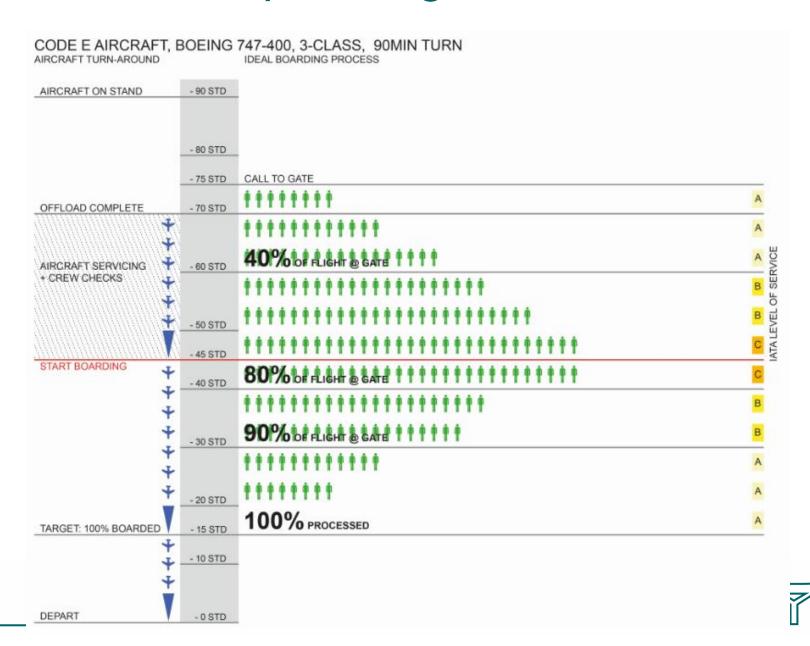




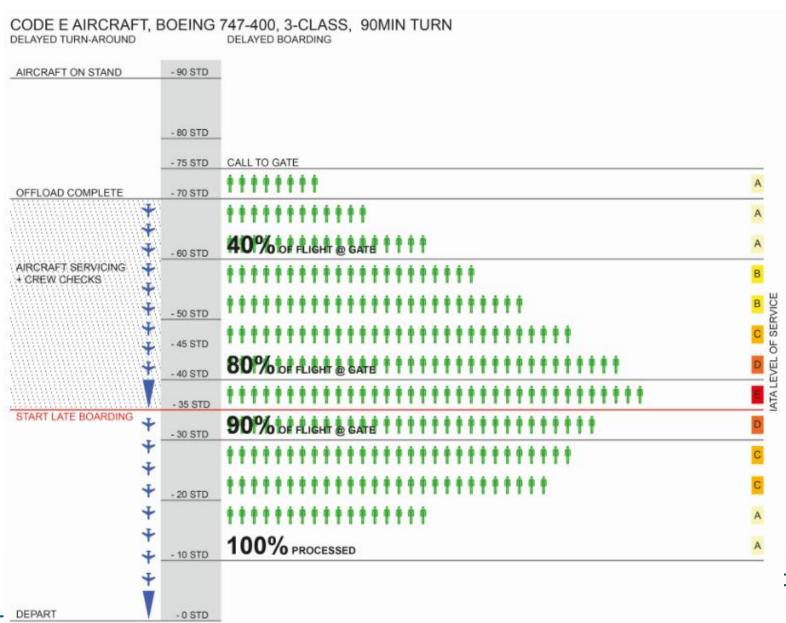
* Code E based on Boeing 747-400, 3-class, 416 seats

416 pax x 80% loadfactor =
$$332.8 \times 20\%$$
 standing = 66.56 pax x $1.2 \text{ m}^2/\text{p}$ = 80 m^2
 $332.8 \times 80\%$ seated = 266.24 pax x $1.7 \text{ m}^2/\text{p}$ = $\frac{452 \text{ m}^2}{532 \text{ m}^2}$

Gateroom planning – Code E



Gateroom planning – Code E

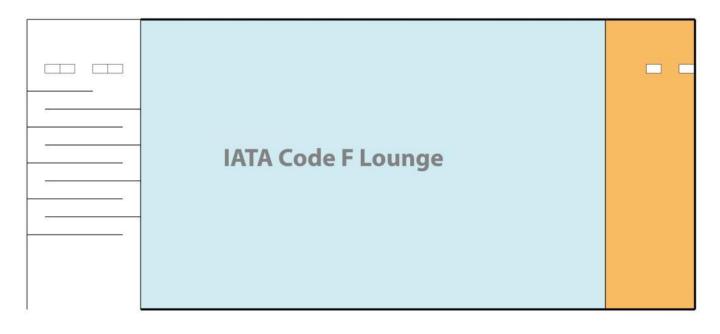




Gateroom planning – Code E





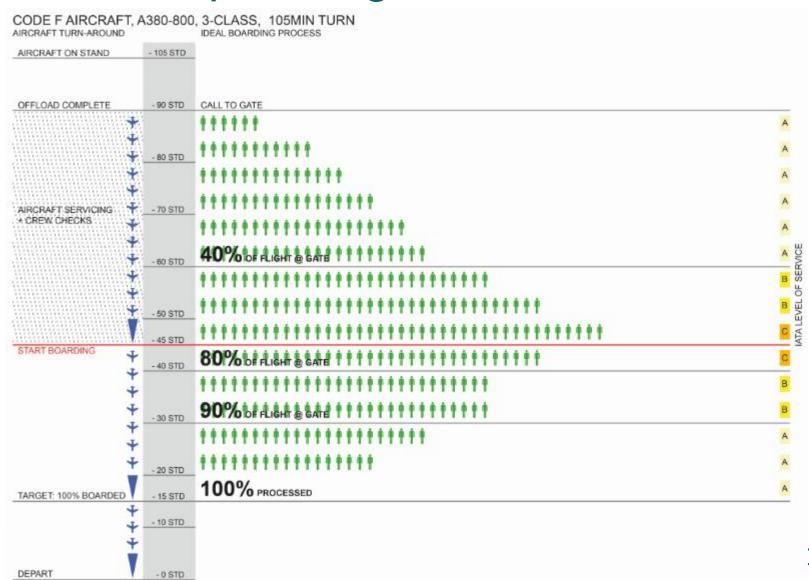


	general circulation	80% seated	20% standing
total lounge area: 710 m ²	1		

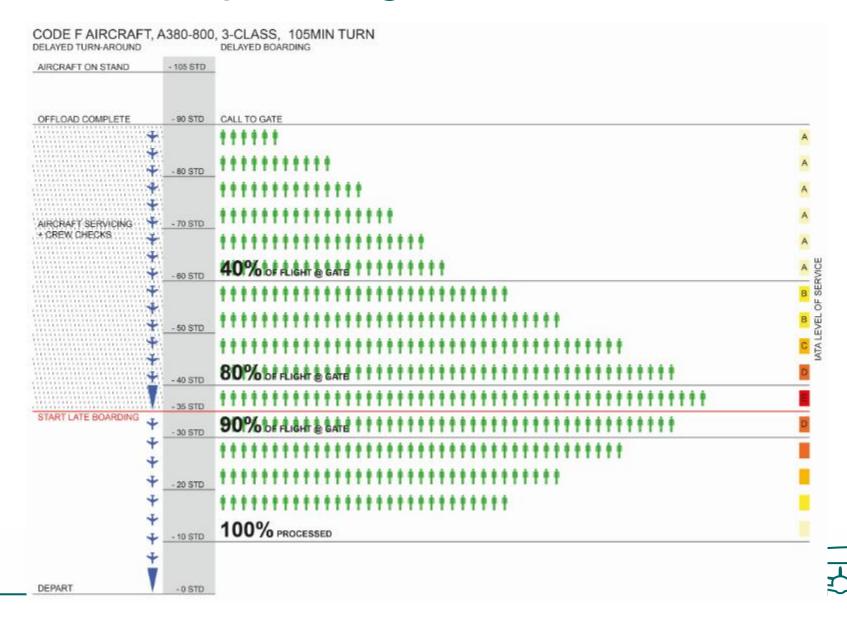
* Code F based on A380-800, 3-class, 555 seats



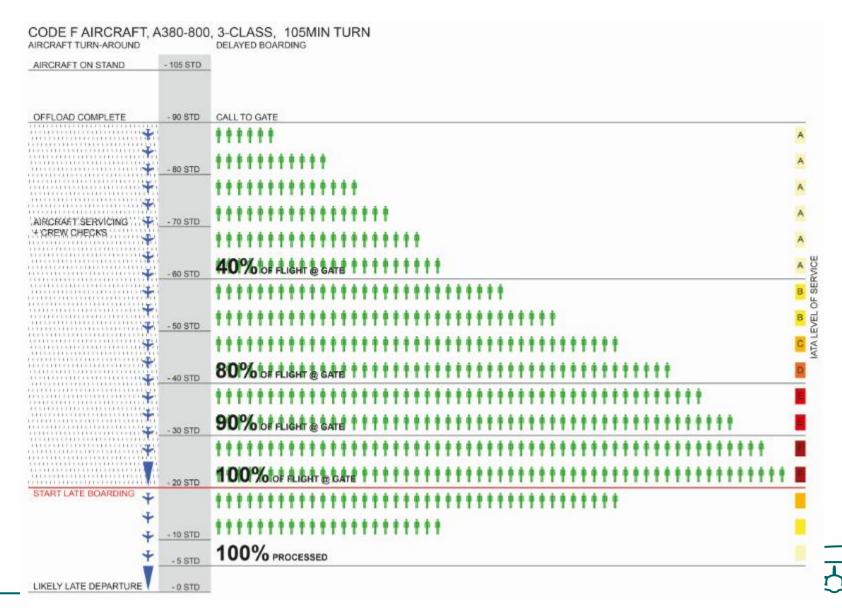
Gateroom planning - Code F



Gateroom planning - Code F



Gateroom planning - Code F



Opportunity Costs

tential Saving
600,000.00
500,000.00
2,200,000.00
18,000,000.00
3,000,000.00
280,000.00
300,000.00
230,000.00
3,000,000.00
450,000.00
1,000,000.00

