

Welcome to NMB/4

31st January 2017



MEETING AGENDA

- **10:00 Opening of NMB/4**
- **Agenda item 1:** History of the Independent Arrivals Review, Action Plan and introduction to the NMB
- **10:15 Agenda item 2:** Progress Report Arrivals Review Recommendations
- **11:15 - 11:45 Coffee Break**
- **11:45 Agenda item 3:** Continuous Improvement: Future Work Plan 2017-2018
- **12:00 Agenda item 4:** Noise Management Board Panel
- **13:00 Close of NMB/4**

NOISE MANAGEMENT BOARD

Membership

- Gatwick Airport Ltd
- Civil Aviation Authority
- Department for Transport
- NATS
- Air Navigation Solutions
- Airline Operators Committee
- Chair of GATCOM
- East Sussex and West Sussex County Councils
- Surrey and Kent County Councils

Community Noise Groups:

- The High Weald Councils Aviation Action Group (**HWCAAG**) & Association Parish Councils Action Group (**APCAG**)
- Communities Against Gatwick Noise Emissions (**CAGNE**) & Plane Wrong
- East Sussex Communities for Control of Aircraft Noise (**ESCCAN**) & Tunbridge Wells Anti Aircraft Noise Group (**TWAANG**)
- Gatwick Obviously Not (**GON**) & Pullborough Against Gatwick Noise Emissions (**PAGNE**)

Arrivals Review Progress Report

Produced For NMB/4 31st January 2017



NMB DASHBOARD

Imm-01 A320 Series Noise Modification New charging regime agreed and to be applied from January 2018. Airline modification programs underway. Progress to be routinely monitored by GAL and reported to NMB.	<i>Due by January 2017</i>	
Imm-02 DfT Engagement on A320 Series Noise Modification Recommendation complete. DfT had engaged with Airbus and the European Commission and committed to explore possibilities to reach international agreements.	<i>Complete</i>	
Imm-03 Joint review of Land Use Policy A workshop was held on the 10th November. Follow-on initiatives are being taken forward by GAL.	<i>Complete</i>	
Imm-04 Information booklet Booklet has been drafted and circulated to NMB, GATCOM, NATMAG for comment. Publication expected March 2017.	<i>Due by August 2016</i>	
Imm-05 Increase in CDA commencement to 7,000ft Implemented and awaiting approval from the DfT to make permanent.	<i>Due by December 2016</i>	
Imm-06 Further CDA improvement initiative Recommendation complete through a CDO workshop. Follow-on initiatives defined in the 2017/2018 workplan.	<i>Complete</i>	
Imm-07 CDA from 8000ft Discussed at a CDO workshop. Implementation in isolation is not possible due to airspace constraints. GAL engaging with NATS to explore options. Will be addressed in the 2017/2018 workplan.	<i>Due by December 2016</i>	
Imm-08 CDA taxonomy 2017 Part of CDO workshop. Being scoped with the CAA.	<i>Due by January 2017</i>	
Imm-09 Route spacing design criteria Recommendation complete. CAP 1378 published.	<i>Complete</i>	uous
Recommendation complete.	<i>Due by December 2016</i>	
Review analysis and recommendations. Report through NMB.		

23 ARRIVALS REVIEW RECOMMENDATIONS

Grouped for presentation:

Noise Management Board
(1 recommendation)

A320 modification
(2 recommendations)

Continuous descent arrivals
(4 recommendation)

ILS minimum joining point
(1 recommendation)

Gatwick airport actions
(6 recommendations)

Runway direction protocol
(1 recommendation)

Night arrivals KPI
(1 recommendation)

Future airspace changes
(3 recommendations)

New technology
(3 recommendations)

NOISE MANAGEMENT BOARD

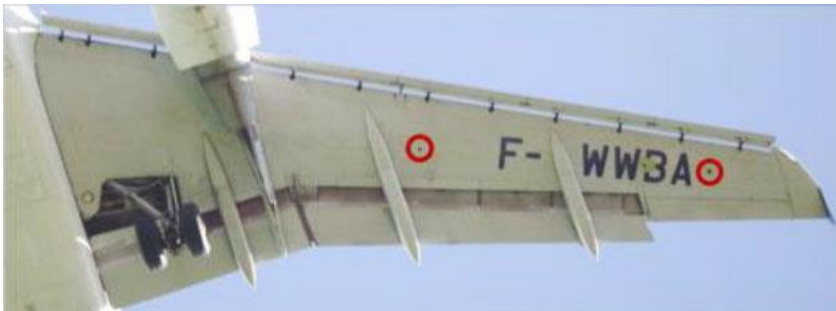
Imm-18 Establishment of the Noise Management Board

Main progress in 2016:

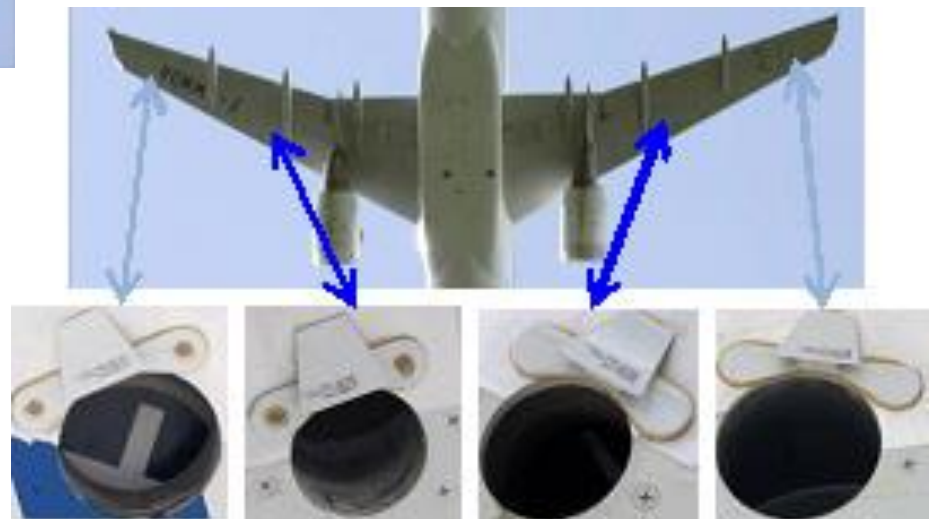
- NMB has been established, meeting bi-monthly.
- Independently Chaired by Bo Redeborn
- Constituted on 21st June 2016, with 4 meetings held to date
- An NMB website has been set up to provide information on NMB constitution, Terms of Reference, minutes and agenda
www.gatwickairport.com/business-community/aircraft-noise-airspace/airspace/noise-management-board

A320 MODIFICATION - I

Imm-01 Accelerated modification programme, with noise penalty thereafter
Imm-02 DfT engagement on A320 series modification



What is the modification?



A320 MODIFICATION - 2

Imm-01 Accelerated modification programme, with noise penalty thereafter
Imm-02 DfT engagement on A320 series modification

Main progress in 2016:

- Charges regime agreed and to be applied from January 2018. A higher charge will apply to unmodified A320 series aircraft
- NMB is routinely monitoring airline modification programs
- Four out of five largest operators planned to be modified by December 2017
- Gatwick has written to each A320 operator to reaffirm the intent of the IAR
- Gatwick has written to the DfT proposing a Europe-wide scheme

A320 MODIFICATION - 3

Airline	% and number of aircraft with FOPP modification at 1 st January 2017	Number of aircraft in fleet and planned completion by
easyJet	66% (169)	257 (December 2017)
British Airways	56% (73)	130 (September 2017)
Monarch	6% (2)	31 (June 2017)
Vueling	27% (30)	109 (December 2017)
Thomas Cook	33% (7)	21 (TBC)
Aer Lingus	0%	34 (28 by December 2017)
Iberia Express	0%	21 (December 2017)
Small Planet Airlines	Awaiting Information	
WOWAir	44% (4)	9 (TBC)
Turkish Airlines	Awaiting Information	
Air Malta	0%	8 (5 December 2017)
TAP Air Portugal	53% (23)	43 (TBC)
Aegean Airlines	Awaiting Information	
Wizz Air	Awaiting Information	
Tunisair	Awaiting Information	

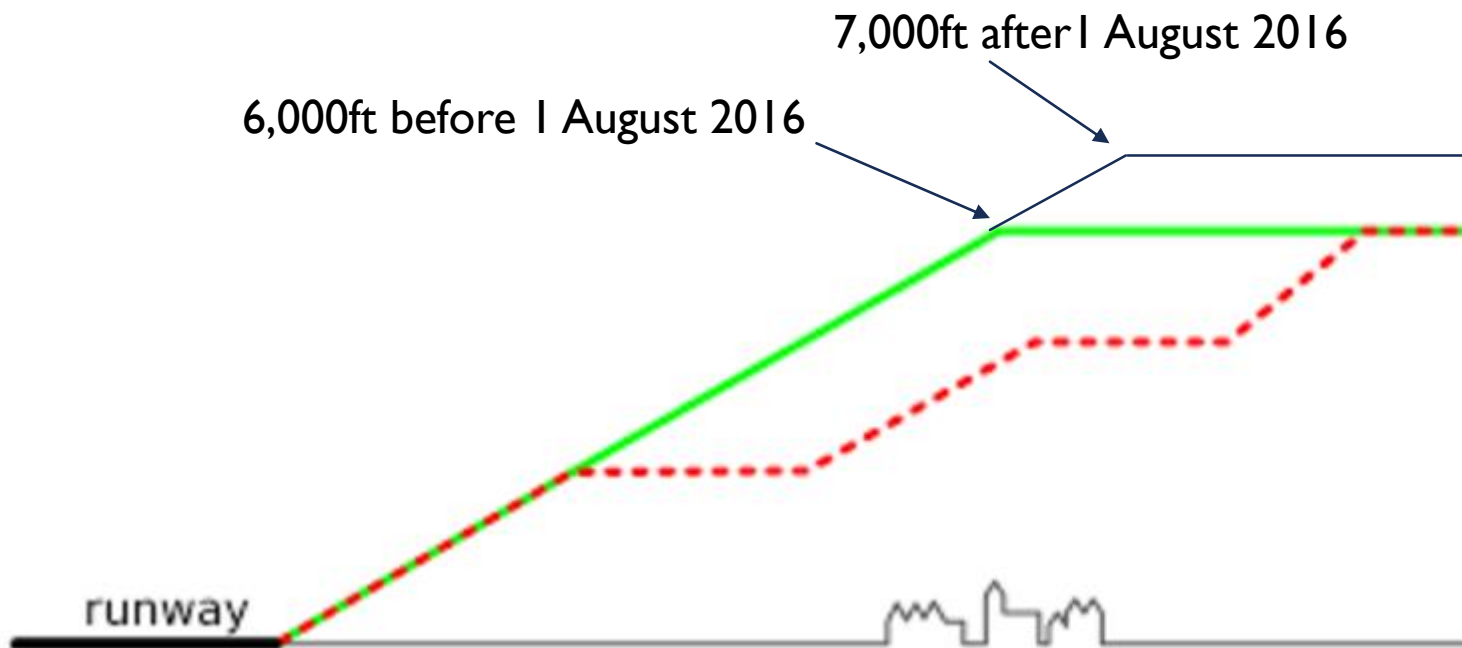
95%

99%

Responsible for % of A320 family movements at Gatwick

CONTINUOUS DESCENT ARRIVALS - I

Imm-05 Increase in CDA commencement to 7,000ft



CONTINUOUS DESCENT ARRIVALS - 2

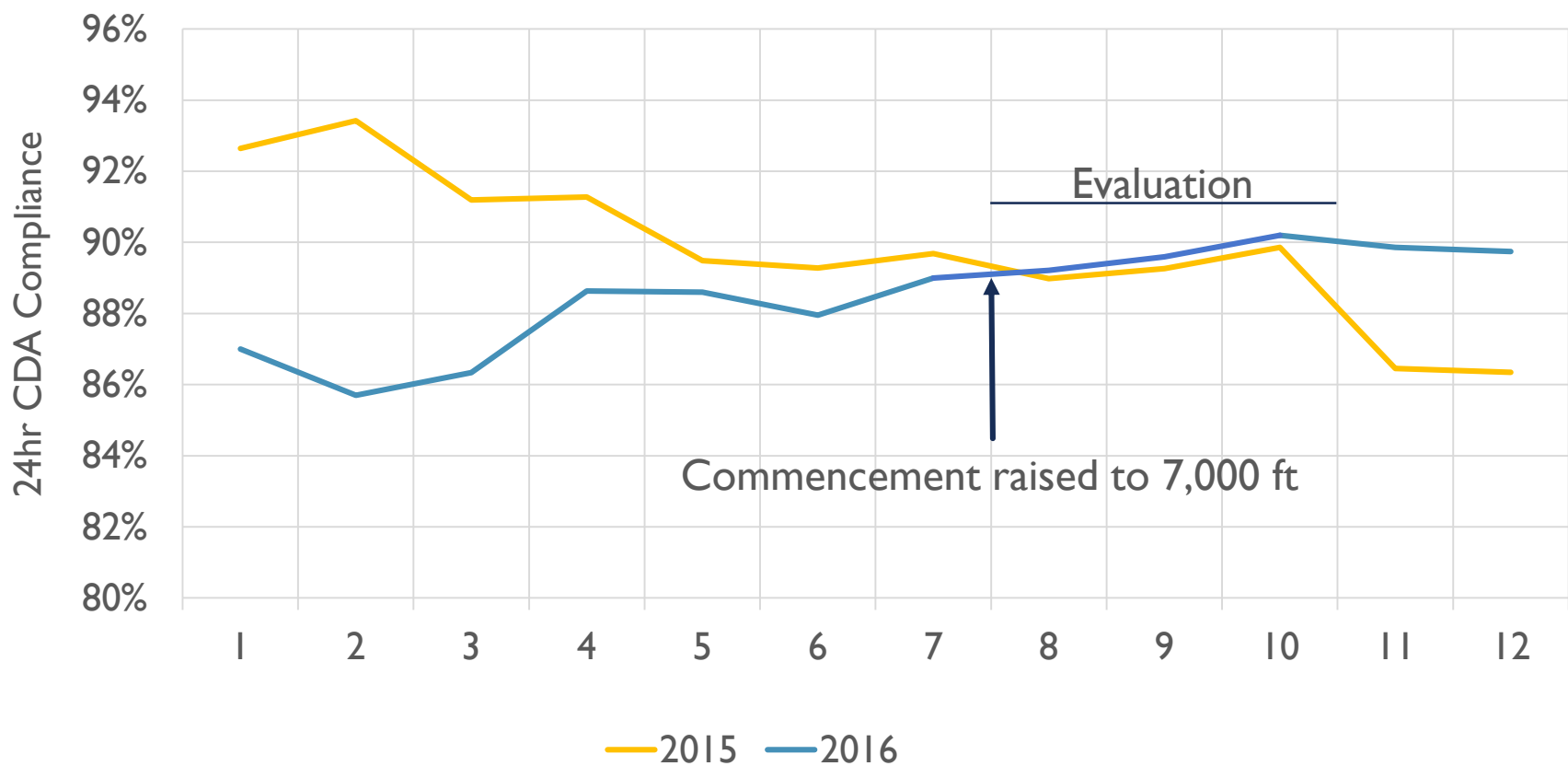
Imm-05 Increase in CDA commencement to 7,000ft

Main progress in 2016:

- Engaged with NATS, ANS, DfT, CAA and airlines
- CDA commencement altitude changed by GAL on 1st August 2016
- 3 month evaluation saw 24Hr CDA compliance increased (to 90%), highest since April 2015. Compliance remains high.
- Evaluation was submitted to DfT in November 2016 with request to make permanent
- DFT requested community feedback. Awaiting decision
- Height increase has been maintained pending DfT decision

CONTINUOUS DESCENT ARRIVALS - 3

Yearly variation in 24hr CDA compliance at Gatwick



CONTINUOUS DESCENT ARRIVALS - 4

Imm-06 Further CDA improvement initiative

Imm-07 CDA from 8,000ft

Imm-08 CDA taxonomy

Main progress in 2016:

- CDO workshop on 21st October with NATS, airlines, CAA, BALPA and communities
- Options for CDA improvement were discussed and assessed
- Output paper developed and circulated to the NMB
- Future objectives will be identified in the 2017/18 workplan
- GAL in discussions with CAA ERCD to identify potential options for a revised CDA taxonomy and definition

ILS MINIMUM JOINING POINT - I

Imm-10 Change to ILS minimum joining point from 10 nm to 8 nm



ILS MINIMUM JOINING POINT - 2

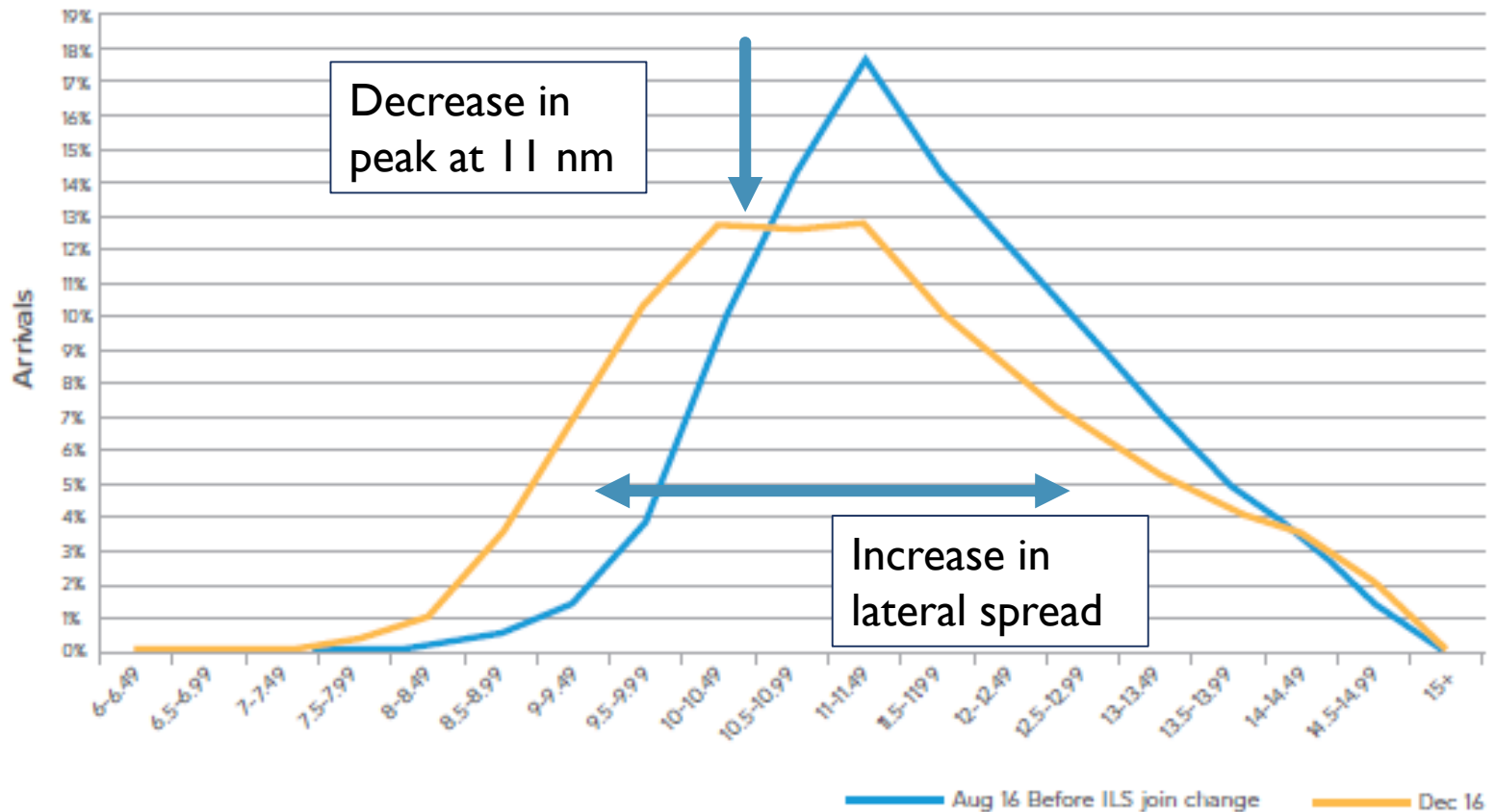
Imm-10 Change to ILS minimum joining point from 10 nm to 8 nm

Main progress in 2016:

- ILS minimum joining point was changed from 10 nm to 8 nm on 15th August 2016
- Change made by NATS following safety assessment and CAA approval
- A “monitored evaluation” for six months
- Communities reporting both improvements and unexpected concentration in areas away from the ILS
- The distribution of the wider arrivals swathe will be part of the NMB’s 2017/18 work plan in relation to ‘fair and equitable’ distribution

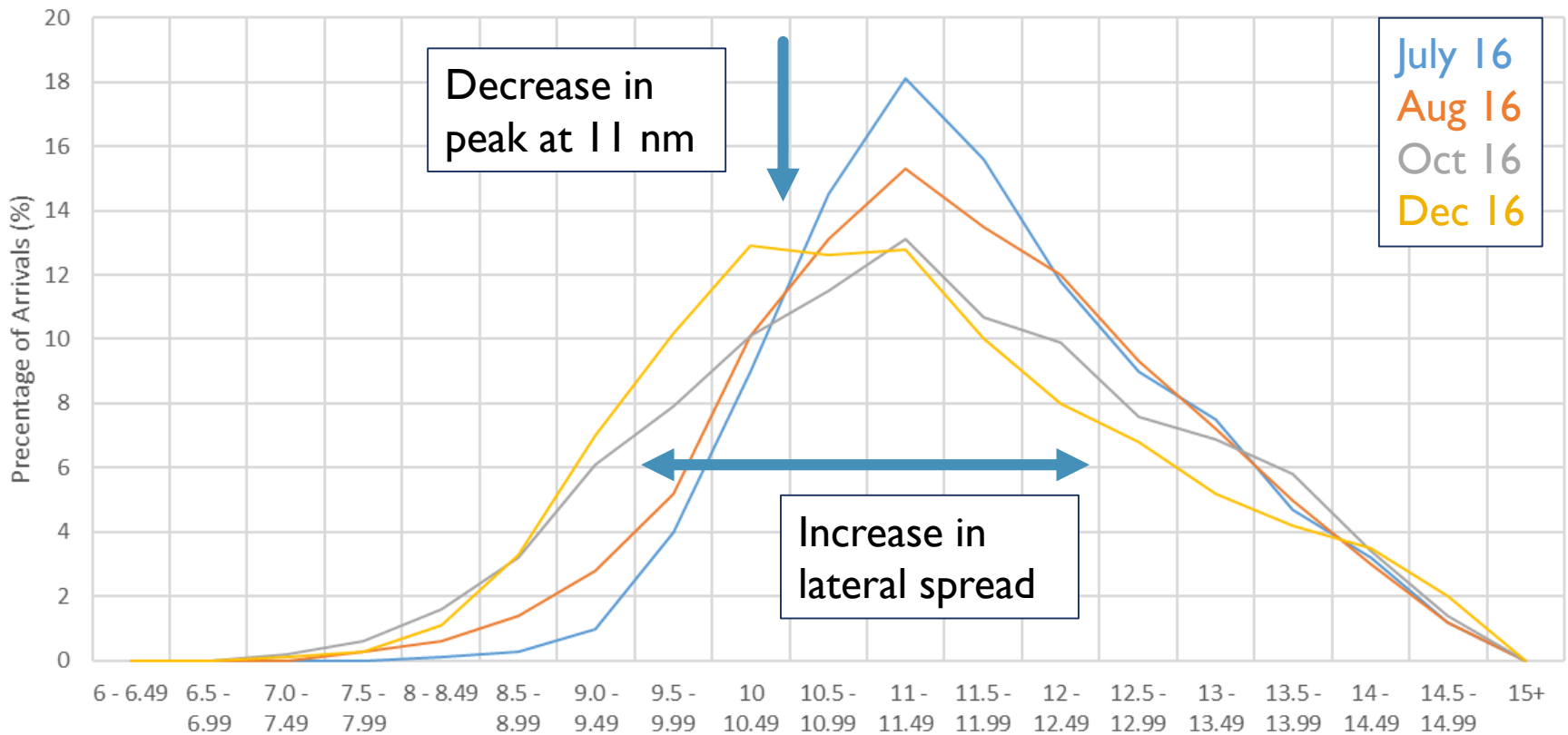
ILS MINIMUM JOINING POINT - 3

December 2016 vs. August 2016 before ILS joining point change, both directions

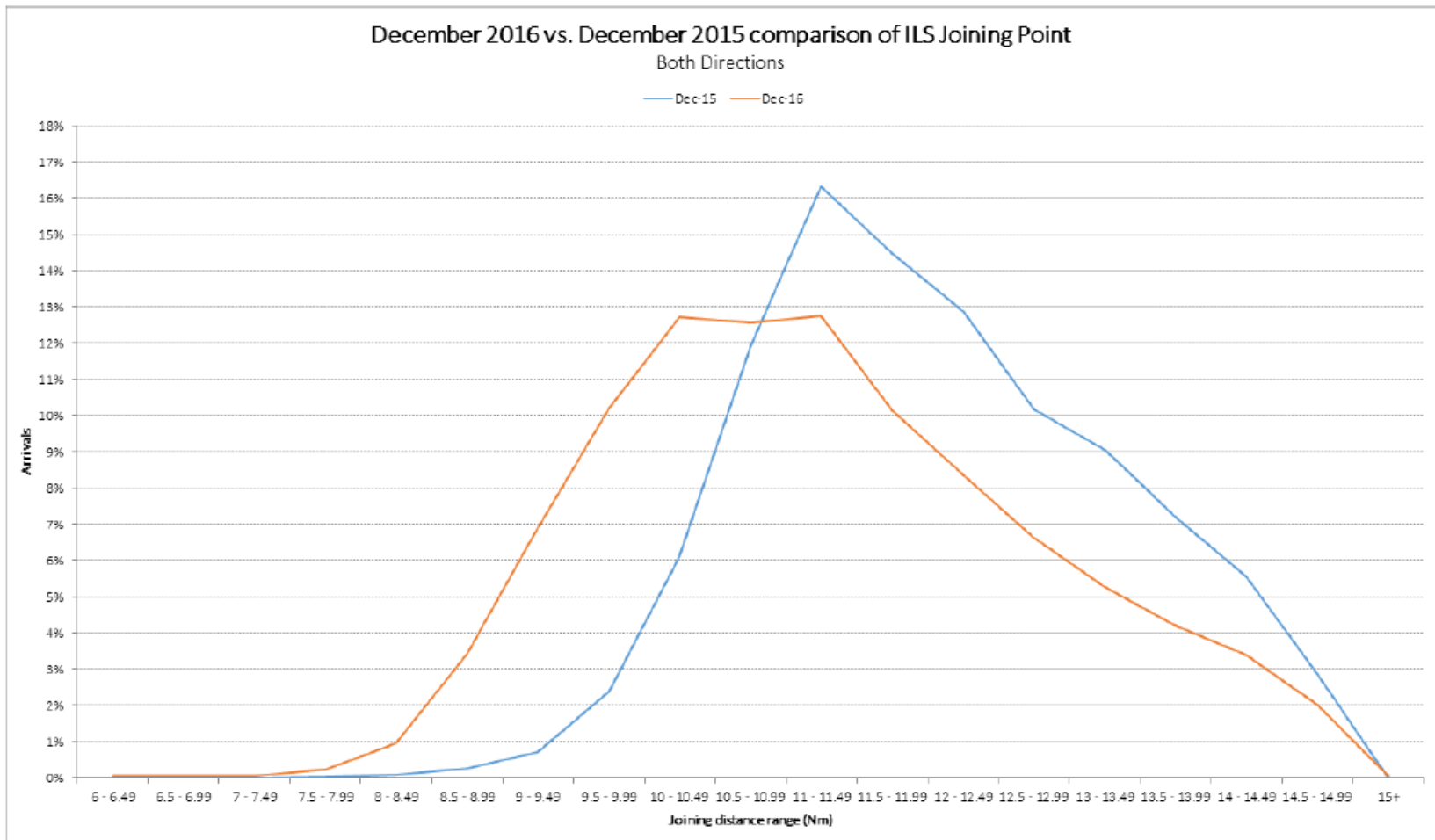


ILS MINIMUM JOINING POINT - 4

ILS Joining Point Distribution July, August, October and December 2016



ILS MINIMUM JOINING POINT - 5



Gatwick Airport Actions - 1

Imm-04 Produce noise information booklet

Imm-16 Engage additional community manpower

Imm-19 Produce a response to arrivals review

Main progress in 2016:

- Noise information booklet has been drafted, to be published in March
- Community Engagement Team received additional staff
- GAL 'Final action plan' published in June 2016 and '2017 progress report' published today - online at www.gatwickairport.com/noise



Gatwick Airport Actions - 2

Imm-03 Undertake joint review of Land Use Policy

Main progress in 2016:

- LUP workshop held on 10th November 2016 with local authorities
- Proposal to develop Planning Portal for local authorities
- Increased cooperation between planning authorities
- Actions taken through to GAL's 2017/18 work plan



Gatwick Airport Actions - 3

Imm-17 Introduce enhanced complaints policy

Main progress in 2016:

- Enhanced complaints policy and reporting system implemented
- Evolution of tool to address feedback received as part of ongoing continuous improvement under the 2017/18 workplan
- System demonstration at end of today's meeting



Gatwick Airport Actions - 4

Imm-20 Produce a year-on progress report

Main progress in 2016:

- Progress across range of recommendations
- 11 of 23 recommendations completed
- NMB process evolving and proving effective
- Continuous improvement embedded through 2017/18 work plan



RUNWAY DIRECTION PROTOCOL

Imm-11 Introduction of a runway direction protocol for noise reasons

Main progress in 2016:

- The recommendation proposed changing runway direction to provide respite in evenings when conditions allow
- A protocol has been proposed
- NMB/3 requested additional information and data analysis which is ongoing
- Full impact of noise changes cannot be quantified without real data
- Option for monitored evaluation
- To be discussed at NMB/5 (April 2017)

NIGHT ARRIVALS KPI

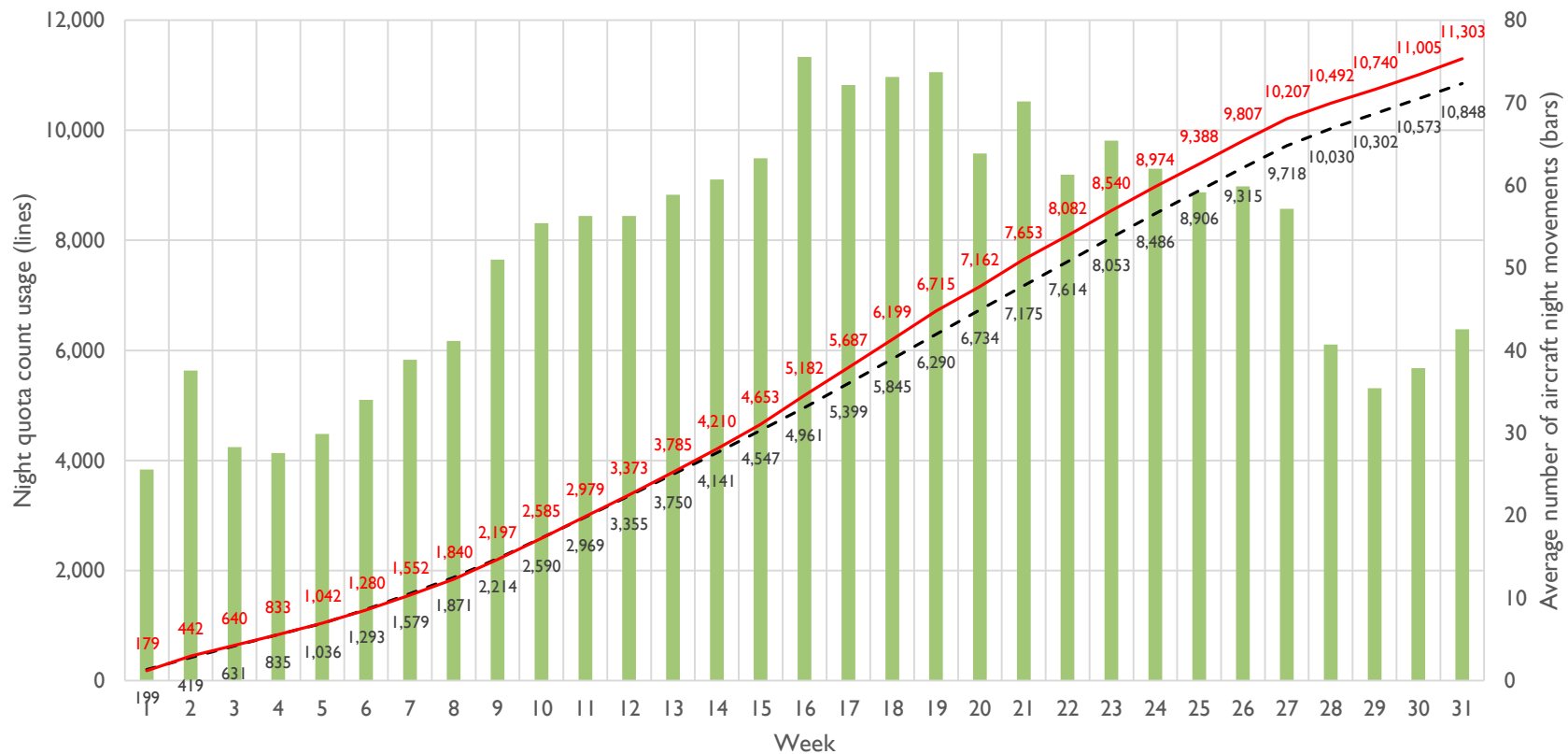
Imm-12 Introduction of a night arrivals Key Performance Indicator (KPI)

Main progress in 2016:

- Gatwick developed expanded scope KPI
- Based on the existing DfT night quota system and covers all night movements, not just arrivals
- The KPI was proposed to the NMB/3 where it was accepted
- First results are included below

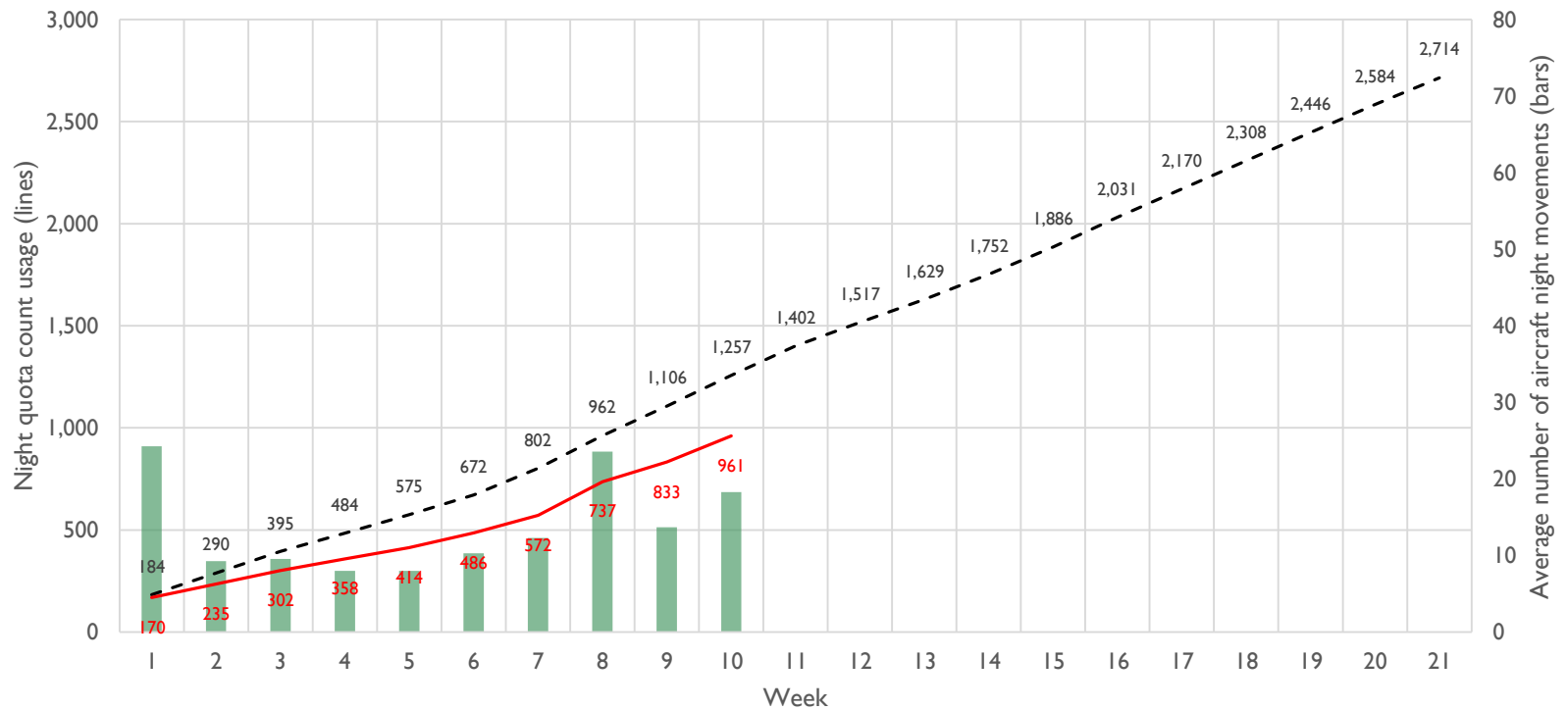
NIGHT ARRIVALS KPI (SUMMER)

Gatwick Airport - Summer 2016 Night Quota - Movements
Cumulative Quota Use Versus Capacity



NIGHT ARRIVALS KPI (WINTER)

Gatwick Airport - Winter 2016/17 Night Quota - Movements
Cumulative Quota Use Versus Capacity



FUTURE AIRSPACE CHANGES

Imm-09 Route spacing design criteria
Aspire-21 P-RNAV to the ILS
Aspire-22 Change to holding areas

Main progress in 2016:

- Route spacing criteria provided to NMB/2, based on CAA guidance, CAPI 378
- GAL has started consulting with NATS and CAA on future airspace options
- NMB working group on FED will provide design principles
- This is a longer term objective which will be incorporated into the London airspace modernisation program.

NEW TECHNOLOGY

Imm-13 XMAN

Imm-14 Time Based Separations (TBS)

Aspire-23 AMAN and DMAN

Main progress in 2016

- Engaged with NATS and ANS
- Options for implementation were developed with feasibility assessed
- Deployment plans developed
- Updates will be provided at NMB/5
- Work will continue into the 2017/18 workplan

SUMMARY

Main progress in 2016

- NMB established
- New A320 charging regime
- CDA raised to 7,000 ft
- CDO workshop held
- ILS minimum joining point to 8 nm
- Night time KPI agreed
- Land use planning workshop held
- Noise information booklet drafted
- New complaints policy introduced

Suggested new items for 2017

in addition to completing remaining recommendations

- Defining “fair and equitable”
- Addressing the arrivals swathe
- Initiatives from the CDO workshop
- Departures