

[REDACTED]
[REDACTED]

2 August 2017
EIR Reference: E0003267

Dear [REDACTED]

I am writing in respect of your request of 2 July 2017, for the release of information held by the Civil Aviation Authority (CAA). I am sorry for the delay in responding to your request for information. We have considered your request in line with the provisions of the Environmental Information Regulations 2004.

Your request:

Under the Freedom of Information Act I request answers to the following questions:

- 1. What are the current i.e summer 2017 flight paths for air traffic approaches to Gatwick and Heathrow airports that pass over East Sussex?***
- 2. What were the flight paths for air traffic approaches to Gatwick and Heathrow airports that pass over East Sussex in summer 2015?***

Arriving aircraft mostly follow set procedures known as Standard Terminal Arrival Routes (STARs) from which, under instruction by Air Traffic Control (ATC), they feed into the final approach paths for landing. The current STAR charts for Gatwick and Heathrow aerodromes are published in the UK Aeronautical Information Package (AIP) which can be downloaded at the following address: <http://www.nats-uk.ead-it.com>

During busy periods, arriving aircraft can also be directed by ATC into holding stacks. A holding stack is a fixed circling pattern (normally oval in shape) in which aircraft fly whilst they wait to land. Generally there are no mandatory flight paths between the holds and the final approach, and it is the responsibility of ATC to instruct pilots to fly specific headings at appropriate times. This is a process known as vectoring, which occurs prior to aircraft being directed into the final arrival sequence. This also means that after leaving the hold, the shape of the ground track will vary from flight to flight.

Diagrams comparing the general pattern of flight tracks over East Sussex and the surrounding areas for a sample of aircraft arriving into Gatwick and Heathrow can be found in Attachment 1.

Figures 1 and 2 in the attachment show the flight tracks for a two-day sample of arrivals into Gatwick during July 2017 and July 2015 respectively. In each diagram the oval shaped pattern of Gatwick's two holds (TIMBA and WILLO) can be clearly seen. Figures 3 and 4 present equivalent flight track data for arrivals into Heathrow during July 2017 and July

Civil Aviation Authority

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2015 respectively. Please note that radar coverage in the Heathrow flight tracking system does not extend to the East Sussex coastline. However, in each diagram the oval shaped pattern of Heathrow's two southerly holds (BIGGIN and OCKHAM) can still be seen.

3. *When were proposed changes to the flight paths over East Sussex changed in the period from summer 2015 through summer 2017?*

Revised airspace arrangements over parts of south-east England became effective on 4 February 2016, as proposed in the London Airspace Management Programme (LAMP) Phase 1A airspace change proposal. These changes were implemented in accordance with the airspace change process, a seven-stage process of development, consultation and approval. The process, which is fully documented in CAP 725: Guidance on the Application of the Airspace Change Process and summarised on the attached information sheet, reflects the Directions given to the CAA by the Secretaries of State for Transport and Defence under Section 66(12) of the Transport Act 2000, together with the Secretary of State's Guidance to the CAA on its environmental responsibilities. Further details regarding LAMP 1A can be found on the CAA website at:

<http://www.caa.co.uk/Commercial-industry/Airspace/Airspace-change/Decisions/London-Airspace-Management-Programme-Phase-1A/>

Amongst the changes proposed in Module C of LAMP Phase 1A was a small alignment change for arrivals above 7,000 feet approaching into Gatwick's existing TIMBA hold from the east and north-east. Whilst the hold alignment remained the same, the effect of the change for arrivals above 7,000 feet entering the TIMBA hold can be seen by comparing the tracks in Figures 1 and 2.

From the holding points, aircraft have always been freely, tactically vectored, as the prevailing traffic situation dictates, from the Holds to establish onto the Instrument Landing System (ILS) for their final approach to land. The ILS is designed so that inbound aircraft will follow a set glidescope on their final approach to the airport; the ILS has an effective range in excess of 15 miles and its localizer beam is extremely narrow for reasons of accuracy. Air traffic controllers routinely look to align aircraft with the runway and establish them on the final approach somewhere between 8 to 10 nautical miles from touchdown. As the traffic density increases, the pattern used by controllers vectoring aircraft to the final approach path unavoidably widens, resulting in aircraft intercepting the ILS further out.

In 2014, the tactical point that controllers started to aim for at Gatwick became somewhere between 10 to 12 nautical miles in order to reduce instances of Unstable Approach (where the pilot has been unable to manage the energy of the aircraft if the approach is too short or too rushed; leading to a deep landing or a go-around). This was more in line with the radar vectoring practices at Heathrow and has had the impact of significantly reducing the number of 'Go-arounds' due to unstable approach; this also reduces the requirement for aircraft to be vectored for a further approach.

It is important to note that this was an operational change in terms of the way in which the air traffic control service provider (NATS En Route Limited) utilises that particular sector of airspace.

4. *Which public authorities were consulted in the changes referred to in question 3 and which public authorities approved the changes referred to in question 3?*

All of the consultation material associated with Module C of the LAMP Phase 1A airspace change proposal has been published on our website and can be accessed through the link below; Appendix D provides a list of stakeholders that were contacted when the consultation was launched on the 15 October 2013.

<http://www.caa.co.uk/Commercial-industry/Airspace/Airspace-change/Decisions/London-Airspace-Management-Programme-Phase-1A/>

As the operational change implemented by NATS En-Route Limited did not involve a change to the actual airspace structure and/or the pre-existing flight procedures established within it, it did not fall within scope of the Airspace Change Process. Consequently, it was not a change that required consultation with neither public authorities nor regulatory approval from the CAA.

If you are not satisfied with how we have dealt with your request in the first instance you should approach the CAA in writing at:-

Caroline Chalk
Head of External Information Services
Civil Aviation Authority
Aviation House
Gatwick Airport South
Gatwick
RH6 0YR

caroline.chalk@caa.co.uk

The CAA has a formal internal review process for dealing with appeals or complaints in connection with requests under the Environmental Information Regulations. The key steps in this process are set in the attachment.

Should you remain dissatisfied with the outcome you have a right to appeal against the decision by contacting the Information Commissioner at:-

Information Commissioner's Office
FOI/EIR Complaints Resolution
Wycliffe House
Water Lane
Wilmslow
SK9 5AF

<https://ico.org.uk/concerns/>

If you wish to request further information from the CAA, please use the form on the CAA website at <http://publicapps.caa.co.uk/modalapplication.aspx?appid=24>.

Yours sincerely



Rihanne Stephen
Information Rights Officer

CAA INTERNAL REVIEW & COMPLAINTS PROCEDURE

- The original case to which the appeal or complaint relates is identified and the case file is made available;
- The appeal or complaint is allocated to an Appeal Manager, the appeal is acknowledged and the details of the Appeal Manager are provided to the applicant;
- The Appeal Manager reviews the case to understand the nature of the appeal or complaint, reviews the actions and decisions taken in connection with the original case and takes account of any new information that may have been received. This will typically require contact with those persons involved in the original case and consultation with the CAA Legal Department;
- The Appeal Manager concludes the review and, after consultation with those involved with the case, and with the CAA Legal Department, agrees on the course of action to be taken;
- The Appeal Manager prepares the necessary response and collates any information to be provided to the applicant;
- The response and any necessary information is sent to the applicant, together with information about further rights of appeal to the Information Commissioners Office, including full contact details.

Figure 1 Gatwick arrivals, 13-14 July 2017

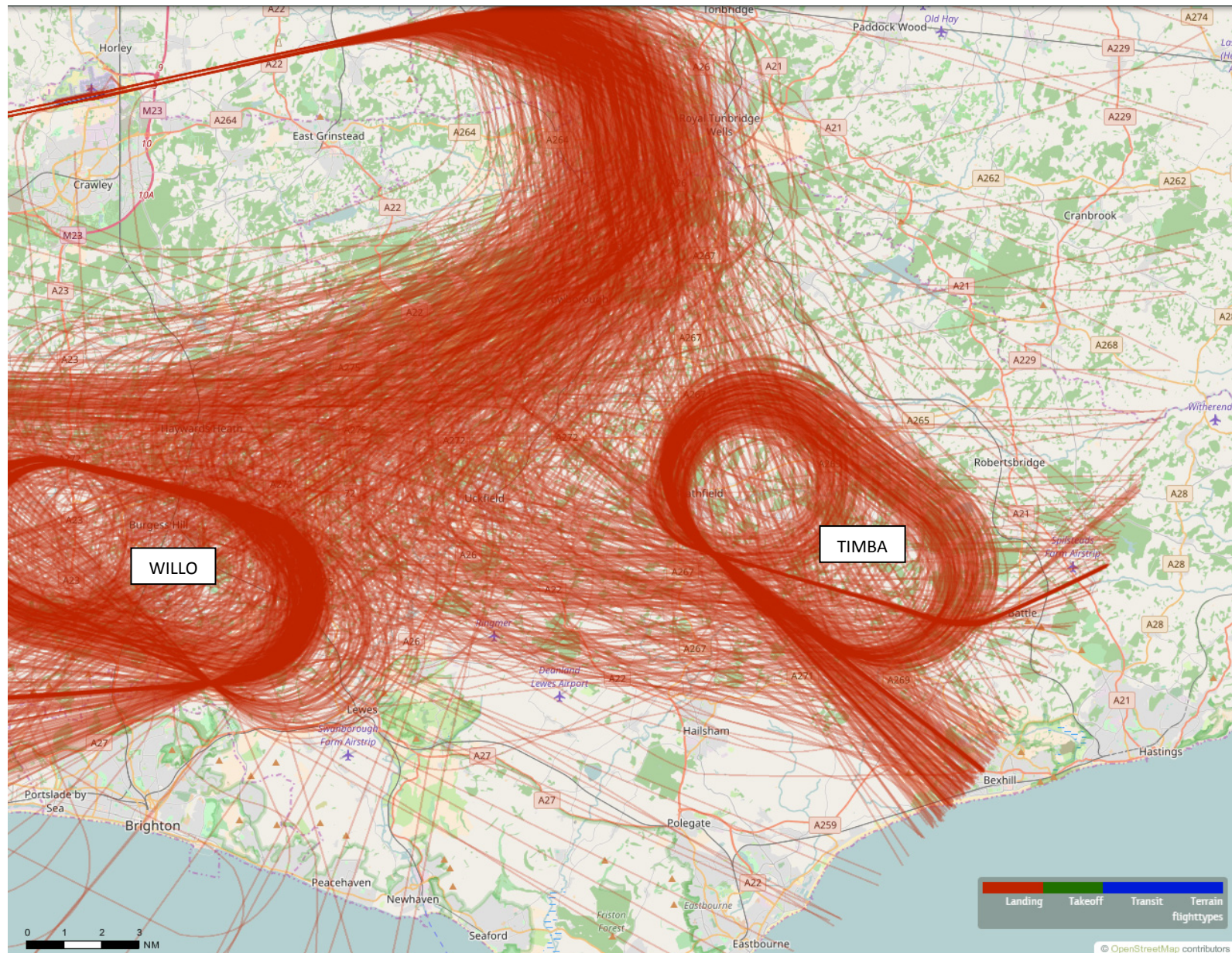


Figure 2 Gatwick arrivals, 10-11 July 2015

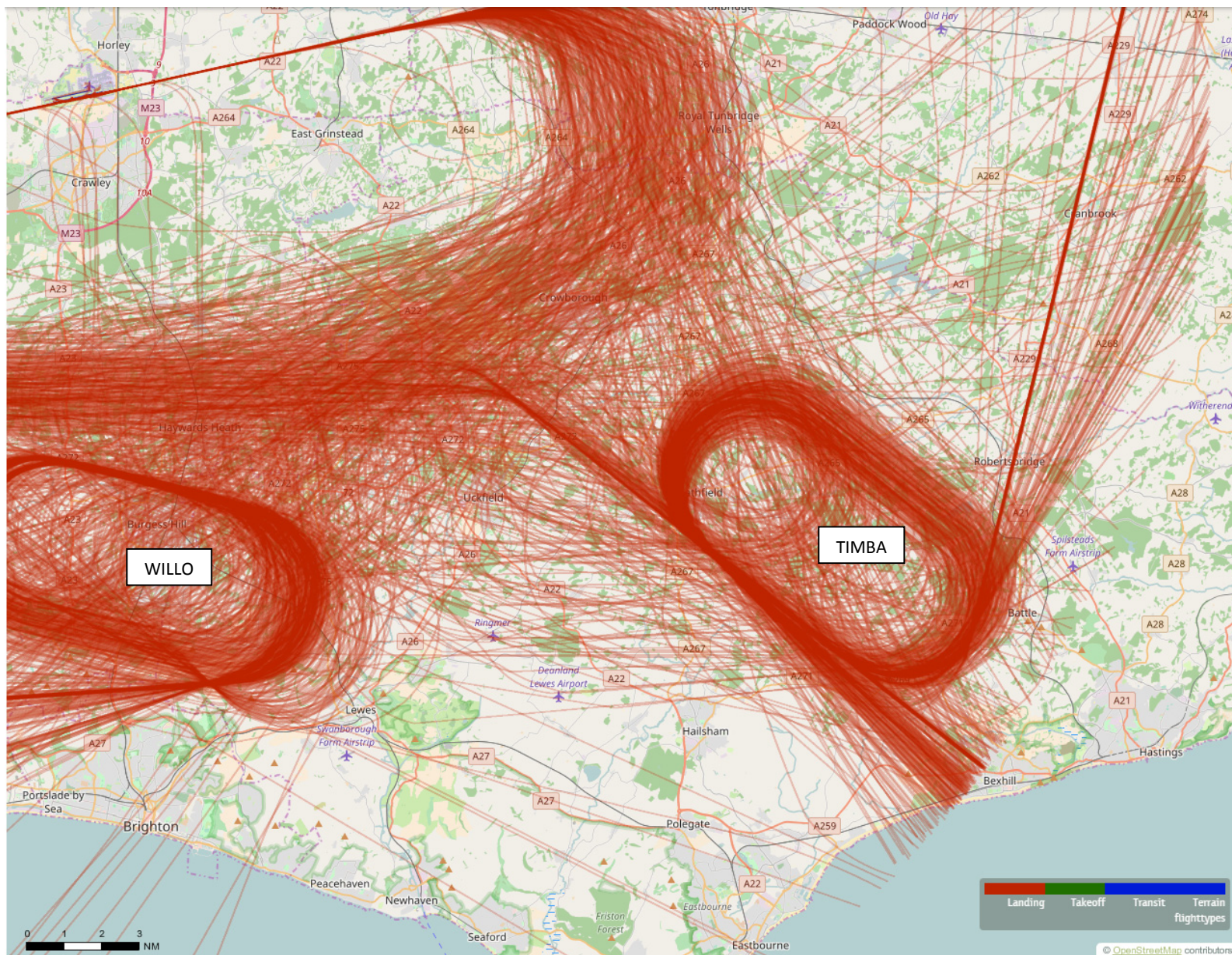


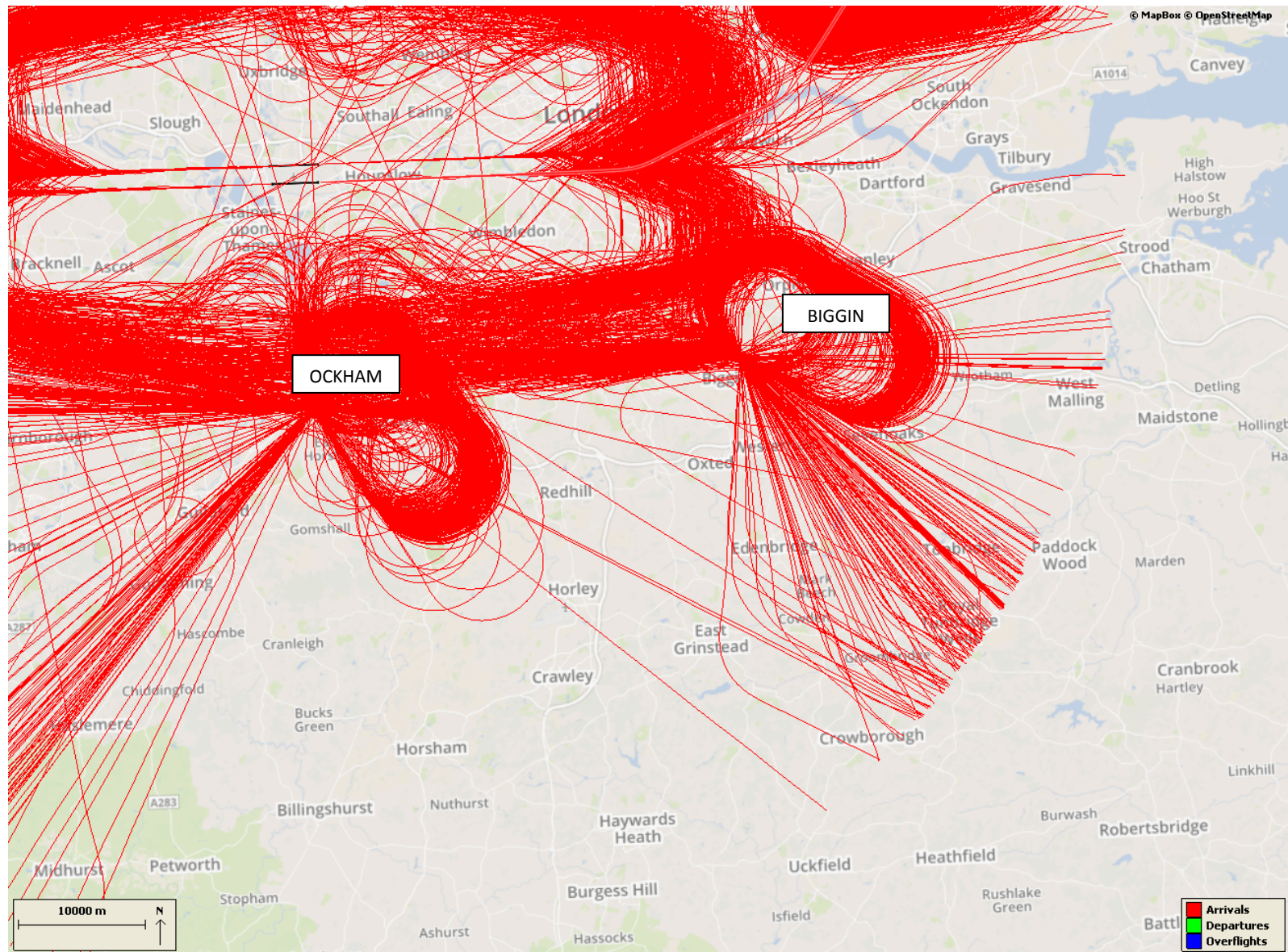
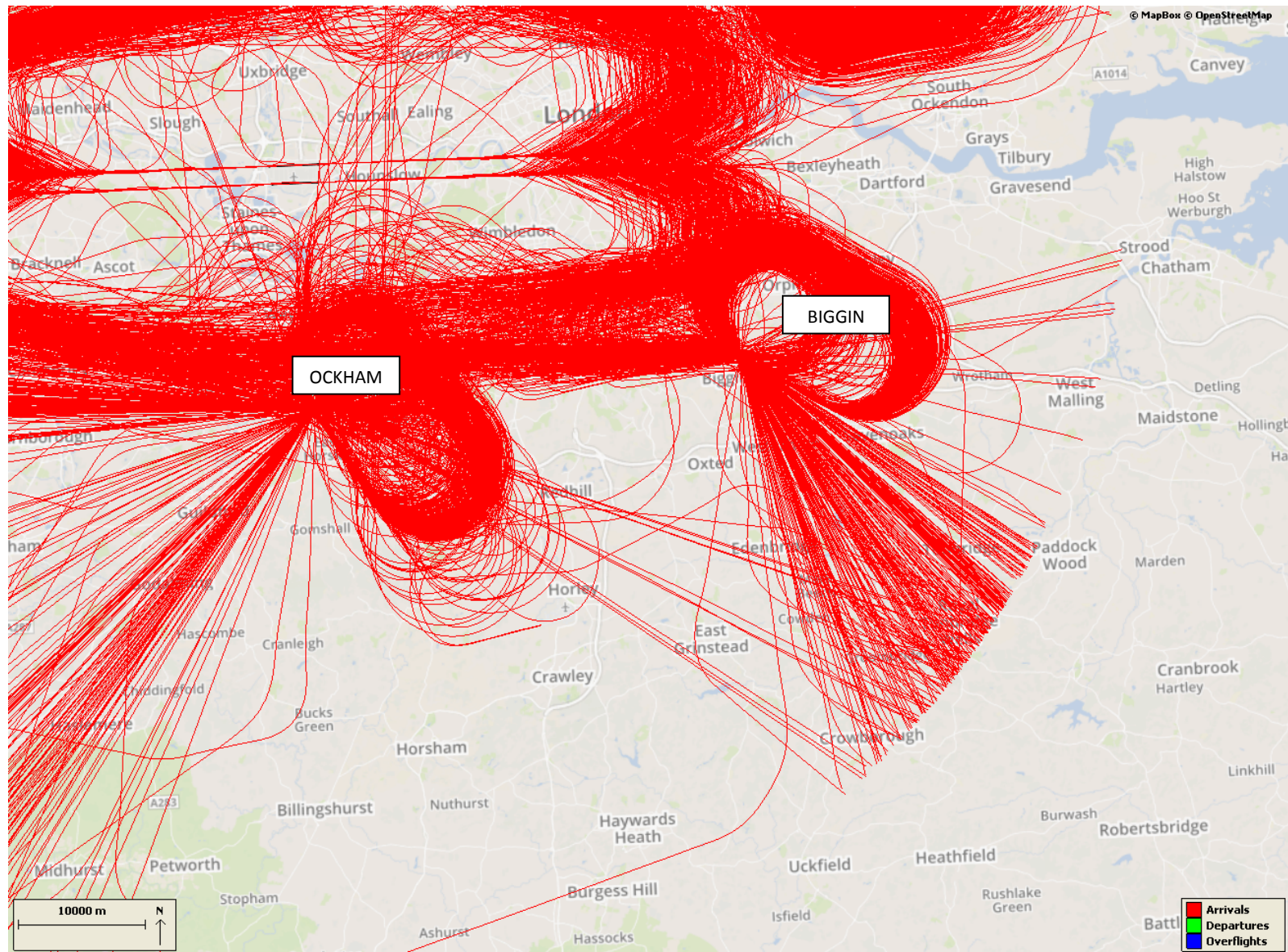
Figure 3 Heathrow arrivals, 20-21 July 2017

Figure 4 Heathrow arrivals, 16-17 July 2015

The Airspace Change Process

Introduction.

The CAA's Safety and Airspace Regulation Group (SARG), as the national airspace approval and regulatory authority is responsible for airspace policy and planning in the UK. As such, the Director, SARG, is charged with approving changes to the dimensions, classification or use of UK airspace. These changes can vary from being straightforward, simple modifications that are easy to implement with little impact on airspace users, to changes that are complex, extensive and which impact on a variety of airspace users and the general public. Changes to airspace arrangements should only be made after consultation, only where it is clear that an overall environmental benefit will accrue, or where airspace management considerations and the overriding need for safety allow for no practical alternative. The process to be followed for amending the structure of airspace reflects the CAA's statutory duties as set out in the Ministerial Directions given by the Secretary of State for Transport and the Secretary of State for Defence under Section 66(1) of the Transport Act 2000, and the Environmental Guidance¹ provided by the Secretary of State for Transport. The Directions are reproduced in the Guidance which is available from the Department for Transport (DfT) website:

<https://www.gov.uk/government/speeches/air-navigation-guidance>

The Airspace Change Process, outlined in Civil Aviation Publication (CAP) 724 – *The Airspace Charter* and CAP 725

¹ Guidance to the CAA on Environmental Objectives relating to the Exercise of its Air Navigation Functions, given by the Secretary of State for Transport under Section 70(2)(d) of the Transport Act 2000.

– CAA Guidance on the Application of the Airspace Change Process is available from the CAA website:

www.caa.co.uk/docs/33/cap724.pdf

www.caa.co.uk/docs/33/cap725.pdf

Roles & Responsibilities

The Change Sponsor:

- Owns, and is responsible for developing, the Airspace Change Proposal (ACP).
- Is accountable for identifying the stakeholders to be engaged during the consultation exercise.
- Designs and carries out consultation on the operational and environmental impacts of the proposed airspace change.
- Is accountable for the decisions to modify or not modify its proposed airspace design in light of the responses to the consultation exercise.

The CAA as Regulator:

- Owns, and is fully responsible for, the Airspace Change Process.
- Provides assistance on the application of the Process and guidance on fulfilling the operational, environmental and consultation requirements.
- Scrutinises and assesses the Formal Airspace Change Proposal against the regulatory requirements.
- Approves/Rejects the Formal Proposal.

- Is accountable for the regulatory decision-making.

The stages of the Airspace Change Process are outlined below.

Stage 1 – Framework Briefing. SARG representatives meet with the Change Sponsor to discuss the embryonic proposal, and highlight key stages and requirements of the Airspace Change Process. It provides the opportunity to discuss the structure of the formal ACP submission, as well as environmental and consultation requirements. A SARG Case Officer will be appointed.

Stage 2 – Proposal Development. The Change Sponsor develops initial draft proposals before conducting stakeholder analysis to identify 'people or groups of people who are, or might be, affected - either positively and negatively - by any action taken by the Change Sponsor'. The proposal is then developed by utilising such methods as Stakeholder Focus Groups. This leads to final design option(s) for consultation. At this stage, an Environmental Assessment of the proposal will be initiated which will be completed before the proposal goes to consultation.

Stage 3 – Preparing for Consultation. The Change Sponsor decides on the most appropriate consultation methodology needed to reach all consultees. These methods could include: questions in written consultation documents, Consultation questionnaires or questionnaire-based surveys, using Representative Groups, Focus Groups and Open/Public Meetings. SARG will monitor and advise the Change Sponsor on the scope and conduct of the consultation to be undertaken. However, it remains the

Change Sponsor's responsibility to ensure that the appropriate level of consultation is undertaken. This is a factor that will be taken into account during the Regulatory Decision taken at stage 5. Throughout, consultation must be undertaken in accordance with the **HM Government Code of Practice on Consultation 2008**, which highlights seven criteria:

- **When to consult**

Formal consultation should take place at a stage when there is scope to influence the policy outcome.

- **Duration of consultation exercises**

Consultations should normally last for at least 12 weeks with consideration given to longer timescales where feasible and sensible.

- **Clarity of scope and impact**

Consultation documents should be clear about the consultation process, what is being proposed, the scope to influence and the expected costs and benefits of the proposals.

- **Accessibility of consultation exercises**

Consultation exercises should be designed to be accessible to, and clearly targeted at, those people the exercise is intended to reach.

- **The burden of consultation**

Keeping the burden of consultation to a minimum is essential if consultations are to be effective and if consultees' buy-in to the process is to be obtained.

- **Responsiveness of consultation exercises**

Consultation responses should be analysed carefully and clear feedback should be provided to participants following the consultation.

- **Capacity to consult**

Officials running consultations should seek guidance in how to run an effective consultation exercise and share what they have learned from the experience.

Stage 4 – Consultation and Formal Proposal Submission.

The Change Sponsor distributes consultation material and conducts other consultation activities. Following the minimum 12-week consultation period, the Change Sponsor collates and analyses all responses and then decides on the final proposal. This may include airspace design modifications decided upon in light of the consultation responses. This may, in turn, lead to additional consultation that could last another 12 weeks. The Change Sponsor is required to publish feedback to consultees including information on how the final decision on the option selected was reached. The Sponsor will then submit a Formal Airspace Change Proposal to DAP.

Stage 5 – Regulatory Decision. SARG staff undertake a detailed assessment of the Formal Proposal in the form of a Case Study. The SARG Case Officer may seek clarification or supplementary information from the sponsor before making a recommendation to the Director of Airspace Policy on whether the proposal should be approved. The Director, SARG then makes a Regulatory Decision in accordance with the CAA's statutory obligations. The Change Sponsor is informed of the decision and this results in either the proposal moving to implementation or the Change Sponsor modifying the proposal for re-submission. In the case of the latter, it is likely that further consultation will be required.

Stage 6 – Implementation. Once the change is formally approved, the Change Sponsor will prepare changes to operational procedures and submit amendment to aeronautical information publications. Changes to aeronautical procedures, airspace structures and regulations are timed to start on internationally specified Aeronautical Information Regulation And Control (AIRAC) dates, which

occur every 28 days. This ensures that the aviation community, as a whole, is aware of the changes and can prepare. Larger airspace changes may require a period of at least 2 AIRAC cycles, i.e. 56 days, before they can be implemented following regulatory approval.

Stage 7 – Operational Review. DAP will undertake an operational review of the change approximately 12 months after implementation. The purpose of the Review is to determine if the airspace change, as approved, has been implemented and whether the anticipated benefits have materialised. Once complete, the findings of the review will be published on the CAA website.

Summary. The Airspace Change Process ensures that changes to the airspace structure or its use in the UK meet CAA regulatory requirements in respect of safety, consultation, environmental and operational factors, compliance with airspace design criteria, as well as ensuring that the proposal is operationally justified. The 7-stage process ensures that any proposal is properly developed, consulted upon and evaluated to ensure that it delivers the required benefits in terms of safety and airspace capacity, and the environmental impact of the proposal is fully understood.