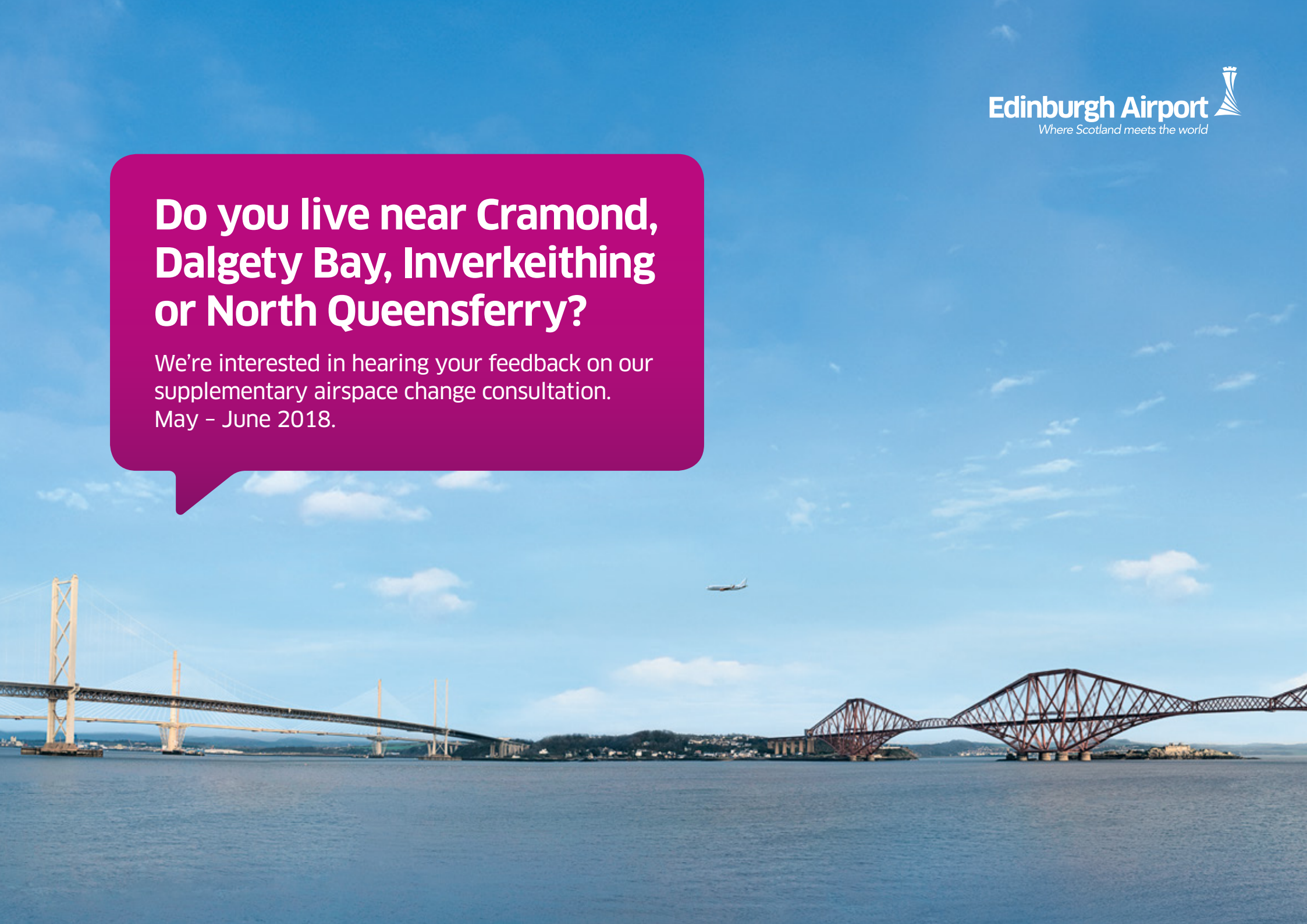
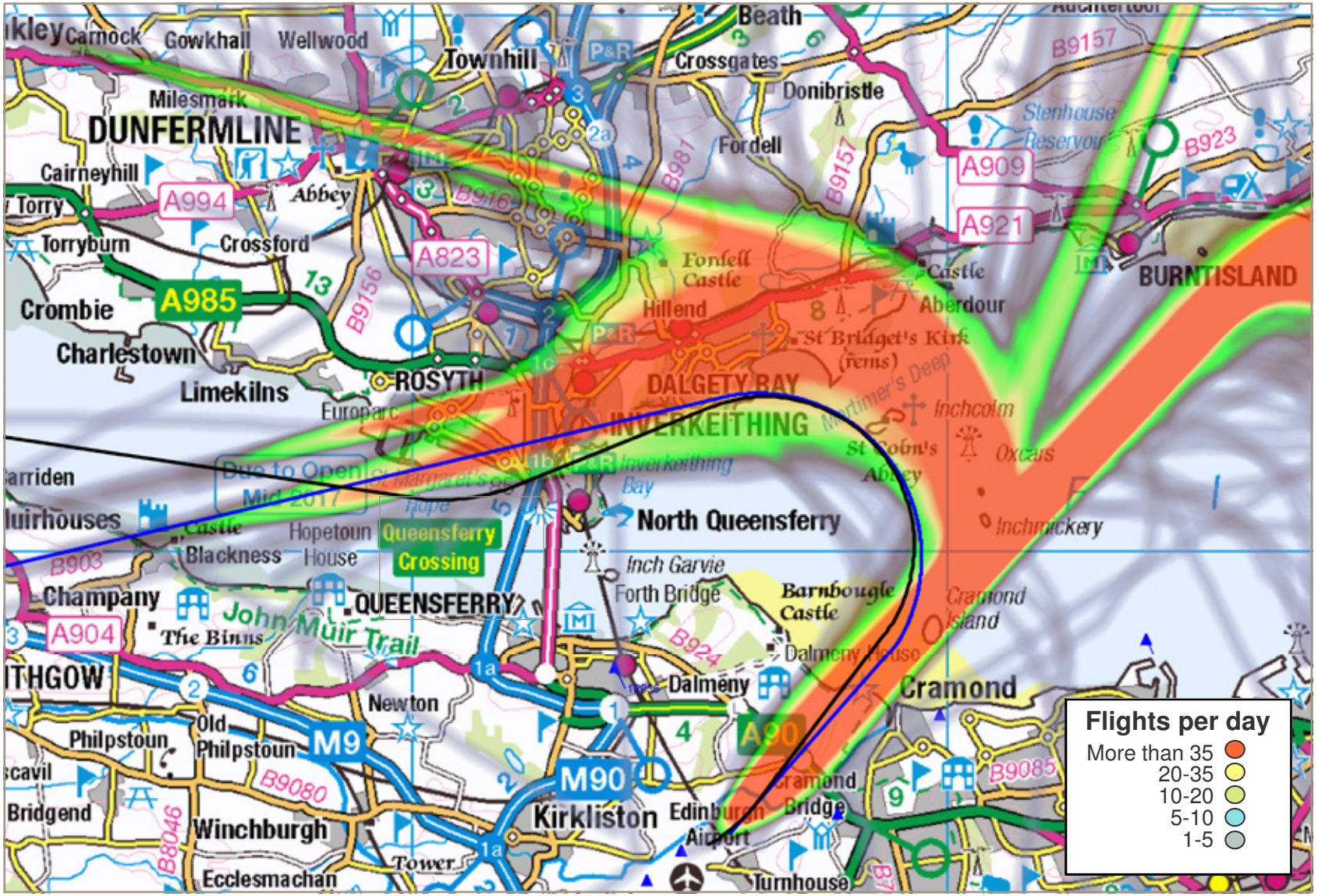

Edinburgh Airport
Where Scotland meets the world
Do you live near Cramond, Dalgety Bay, Inverkeithing or North Queensferry?
We're interested in hearing your feedback on our supplementary airspace change consultation.
May – June 2018.

Map 1: Current flight path

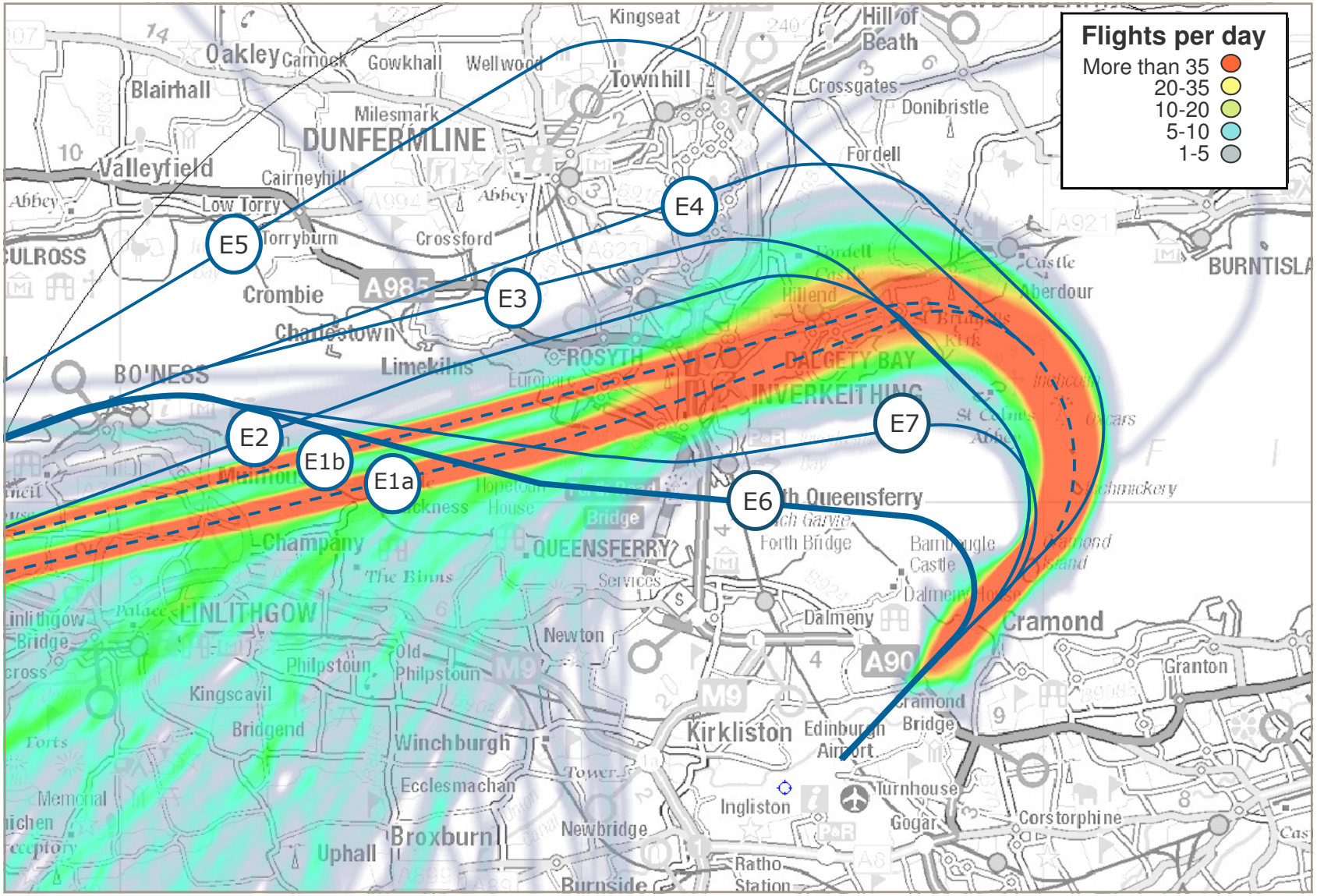


Map 1 shows the current published flight path GOSAM1D centre line (shown in blue) and the proposed centre line of E7a (shown in black).
The colours under the published flight path show the actual flight tracks as flown by aircraft in 2017.

Nominal centre lines explained

With the introduction of RNAV technology, flight paths with now have a nominal centre line. This line is the published flight path, however as it does today, aircraft will fly off the nominal centre line when they turn (this is due to external factors such as wind speed, wither and aircraft speed).

Map 2: Route options for flight path E as included in Consultation 2

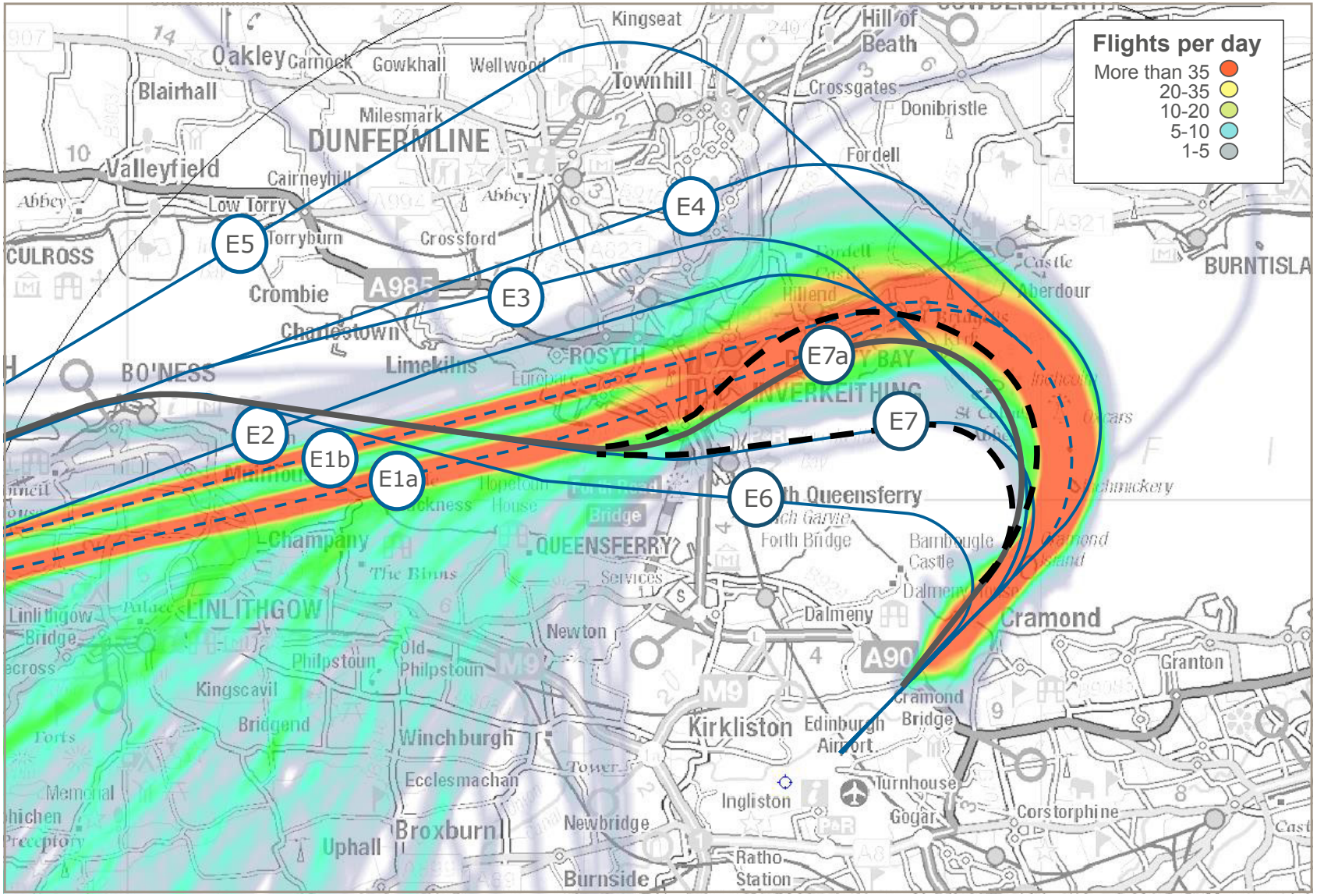


Map 2 shows the current flight tracks, overlaid with flight path options (E1a-E7) as included in Consultation 2 (2017), page 82.

Map 3: Proposed flight path E7a

Map 3 shows the nominal centre line of E7a (shown here in blue). It also shows the area in which the aircraft turn (swathe) and the projected heights of aircraft on this turn. It also shows the possible area that aircraft could be vectored (that is tactical route intervention by air traffic control).

Map 4: Overlay of maps 1, 2 and 3



Map 4 shows the current flight tracks of GOSAM1D (colours underneath), previous flight path option E7 (as marked with (E7)) and Flight path E7a (as marked (E7a)) nominal line, swath and heights. This is shown on the map used for the E flight path in Consultation 2 (2017), to allow easily comparison.

Map 5: Flight simulation results for E7a

Flight simulation has taken place on E7a, these results are shown above. The nominal line shows the proposed flight path – shown in light blue. As currently happens, when aircraft turn they fly off the centre line but within the swathe. This is due to external factors (such as wind speed, weather and aircraft speed). This map shows the simulation results of the types of aircraft used at Edinburgh Airport using RNAV technology (shown in dark blue). The majority of aircraft will track outside the nominal line on the turn (inside the swathe) as they do today.

Table 1: Estimated usage (based on 2016 data)

Runway	Route	Total flights	Total days	Average flights per day (when runway in use) – 2016
06	E7a	6691	163	41

This table is for illustrative purposes only. It takes actual data from 2016 to demonstrate the number of flights if E7a was in operation in 2016 to give an indication of use.

Table 2: Projections of new flight path under the Airspace Change Programme

Runway	Route	2016 Actual flights per day	2019 Forecast flights per day	2024 Forecast flights per day	Estimated runway proportion*
06	E7a	41	42	47	21% or 76 days per year

This table shows the average number of flights projected to use the runway in 2019 and 2024.
*This is projected based on previous proportion. Use is dictated by weather conditions.

Table 3: Proposed times of use

Runway	Route	Day time (06:00-22:59)	Night time (23:00-05:59)
06	E7a	Yes	No

This table shows the day time and night times of use.

How do I participate?

We invite you to participate by giving your feedback on the proposed E7a flight path. A period of four weeks is open to provide feedback on the proposal.

You can provide your feedback by:

- going online at letsgofurther.com
- using the form provided
- writing to us at: Progressive Partnership, Q Court, 3 Quality Street, Edinburgh EH4 5BP, you must include your name and postcode with the letter to be included in the submission to the CAA.

If you'd like to be kept up to date regarding the status of our application to the CAA, please also tick the box online or on our form; or provide your address or email address on your letter to us and tell us that you want to be kept up to date in the letter.

Our Privacy Policy (enclosed) explains how we will use your personal information if you respond to this supplementary consultation. If you have any questions about the Privacy Policy, or would like to contact us about your rights with respect to your personal data, please email DPO@edinburghairport.com

You must provide your feedback by 23.59 on 21 June to be included in the submission to the CAA.

Environmental impact assessment summary

Introduction
We have commissioned an Environmental Impact Assessment on Edinburgh Airport's Airspace Change Proposal which was included in our Application for Airspace Change. We have also commissioned a further study which shows negligible difference between the impacts generated by the original proposed E7 flight path (Map 2) and the new E7a flight path (Map 3).

This is a summary of the further studies undertaken to the Environmental Impact Assessment on Edinburgh Airport's Airspace Change Proposal – the full report is available at letsgofurther.com.

Noise
The ERCD technical note 'Edinburgh Airport – New SIDs ACP Noise Assessment', published the departure SEL footprints for the most frequent aircraft (B737-800), noisiest aircraft (A330) and a large twin turboprop (ANCON type: LTT).

Table 4 compares SEL footprints for areas, populations, households and schools within the 80 and 90dBA SEL contours for the current 06-GOSAM flight path, previously consulted on E7 flight path and the proposed E7a flight path.

Changes to the proposed route from the previously consulted upon E7 to E7a do not change the contour mapping for LA_{eq} or L_{night} out with the areas north of the River Forth. The results of this noise mapping are summarised below and available in full in our EIA.

In addition, further noise mapping out with the specifications of the EIA are covered in the CAA ERCD Report.

1. **Daytime LA_{eq},16hr**
   In 2019, the population and number of households exposed to noise levels >54dB LA_{eq},16hr is similar to the baseline year (2016) with implementation of the proposed programme despite air traffic growth. The number of schools within this contour reduces relative to the baseline. There is a negligible beneficial impact to the local area from implementation of the proposed programme, although noise impacts will increase in some communities and reduce in others.

2. **Night Noise L_{night} (LA_{eq},8hr)**
   There are areas that will experience an increase in night-time noise levels. The modelled scenarios without implementation of the proposed programme show increases in night-time noise levels in all years compared to the baseline, due to aircraft traffic growth. The proposed programme will increase this incrementally in 2024, however most of the increase is due to aircraft traffic growth thus this is a minor adverse impact. The E7a flight path will not fly during the night time period and will have no impact on the Lnight contours.

Table 4: Noise comparisons between GOSAM, E7 and E7a

Route	SEL	Area (sq. km)	Population	Households	Schools
E7 737-800	80	47.4	7,600	3,185	5
	90	6.4	235	95	-
E7 A330-301	80	59.9	9,230	3,910	5
	90	7.8	200	80	-
E7 CVR580 (LTT)	80	7.9	345	140	-
	90	0.95	-	-	-
Route	**SEL**	**Area (sq. km)**	**Population**	**Households**	**Schools**
Current 06 Gosam 737-800	80	46.8	8,915	3,750	4
	90	6.4	295	115	-
Current 06 Gosam A330-301	80	59.3	19,590	8,510	10
	90	7.7	275	105	-
Current 06 Gosam CVR580 (LTT)	80	7.86	410	160	-
	90	0.95	-	-	-
Route	**SEL**	**Area (sq. km)**	**Population**	**Households**	**Schools**
E7a 737-800	80	47.7	8,560	3,575	4
	90	6.4	230	90	-
E7a A330-301	80	60	18,900	8,040	8
	90	7.7	200	80	-
E7a CVR580 (LTT)	80	7.83	355	145	-
	90	0.95	-	-	-

Decrease in comparison on previously consulted on E7 flight path

Decrease in comparison to current 06-Gosam flight path

Decrease in comparison to both current 06-Gosam and previously consulted on E7 flight path

Health
Implementation of the proposed programme will have both positive and negative impacts on the health of communities surrounding Edinburgh Airport, but these are likely to be no more than minor. Overall, the most significant health impact is likely to be the reduction in number of highly annoyed people, so on balance, the proposed programme may have a minor beneficial impact on human health.

Fuel burn/CO_2 emissions
The fuel burn and CO_2 emission savings are affected by a reduction in track mileage in some cases, but are largely driven by improvements to vertical trajectories the new flight paths allow. Overall, the analysis shows that despite increases in traffic, the proposed programme will reduce fuel burn and CO_2 emissions.

Tranquillity and visual intrusion
Route E7a is similar to current flight paths, passing over a sweep of the Firth of Forth and the Fife coast. Aircraft will overfly relatively tranquil areas north and west of Cramond, though this area is already affected by arriving/departing aircraft that use the existing flight paths.

Other more tranquil areas overflown include Inchcolm and sections of the Fife Coastal Path near Dalgety Bay. Again, these areas are already overflown by the current flight paths and additional impacts on visual intrusion and tranquillity are not predicted.

Further west, the route passes over the more settled and busy landscape around Inverkeithing, the Forth Bridges, and the inner Firth of Forth. The coast around Blackness may experience a slight improvement in tranquillity as aircraft will remain over the water, rather than crossing over the coast as they do at present. New impacts on tranquillity in this area will be minimal.

In comparison the previous assessment for E7 stated the following:

The current route heads further out over the Firth of Forth before turning to head over Inverkeithing and passing north of Linlithgow. Aircraft on the new route will be 2-3 km closer to viewers within a high-tranquillity area around Dalmeny House, including the shoreline. This coast, between Hound Point and Cramond, is currently affected by arriving/departing aircraft that use the existing flight paths. However, no traffic currently turns along the route proposed. The flight path is generally within 3 km of the southern coastline, and many aircraft will pass further over the water to complete this turn. The new route is likely to have more of an effect on local tranquillity around North Queensferry, including Port Laing where the Fife Coastal Path follows the edge of a secluded bay. Further west, the route passes over the more settled and busy Firth of Forth, which is already overflown. The coast around Blackness may experience an improvement in tranquillity as aircraft will remain over the water, rather than crossing over the coast as they do at present. New impacts on tranquillity in this area will be minimal.

In summary, the E7a flight path is unlikely to increase effects on rural tranquillity, relative to the existing routes or in comparison to E7 flight path previously consulted on.

Cumulative impacts
Given the largely negligible (beneficial and adverse) impacts associated with implementation of the proposed programme with respect to noise, fuel burn and CO_2 emissions, local air quality, tranquillity and health in isolation, it is considered there would be no significant adverse cumulative impacts due to combined impacts from the proposed programme together with other proposed developments in the area.

Notes

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May 2018