

## Appendix A – Copy of the questionnaire



## European Commission Study on Airport Noise Reduction

### 1. Introduction

This questionnaire has been prepared by Noise Consultants Limited which is supporting the European Commission with a study on *Airport Noise Reduction*. The focus of this study is to understand how aircraft noise is currently being managed within the European Union Member States by collecting up to date information on the implementation of both Directive 2002/49/EC (END) and Regulation 598/2014 (BAR), and any associated practices and approaches in the execution of this noise management framework.



## European Commission Study on Airport Noise Reduction

### 2. Survey Instructions

The questionnaire consists of 77 questions divided into 11 sections:

3. Description of the airport
4. Designation of roles
5. END and BAR implementation into national/local legislation
6. Defining the noise problem
7. Setting the priorities / objectives
8. Assessment methodology of noise measures
9. Identification of noise measures
10. Consultation and engagement
11. Resolution and review
12. Overview
13. Interview

We kindly ask you to complete all the 77 questions included in the questionnaire.

Please contact NCL at [aircraftnoisestudy@noiseconsultants.co.uk](mailto:aircraftnoisestudy@noiseconsultants.co.uk) to receive the Web Link to access and complete the questionnaire online.

## Definitions

**121 Stakeholder briefings:** These are bilateral meetings between the body seeking to engage or consult and individual stakeholder representatives. (e.g., the airport and the home-based airline).

**Consultative Committee Groups:** These are pre-existing often formally established forums, typically covering a range of issues - including scope to comment on the issue being consulted or engaged on.

**Cost-Benefit Analysis:** It is an evaluation method that provides a logical and consistent framework for assessing a particular option or options. A Cost-Benefit Analysis gives an indication of the total economic welfare effects of a project by comparing all costs and benefits.

**Cost-Effectiveness Analysis:** It is an evaluation method focused on achieving a given objective in the most cost-effective way, requiring a comparison of only the costs.

**Development:** It is taken to mean the inclusion of the entire area of the airport - both aviation (e.g. airspace, infrastructure, passenger cap change, movement cap change, flight routes or procedures) and non-aviation (e.g. retail, food & beverage, parking, advertising, car rental, consumer services and landside real estate) uses. It also includes suggested land use on land adjacent to the airport.

**Focus Groups:** These are small group discussions aimed at capturing views and experiences on specific issues. The participants typically share similar characteristics (e.g., men under 35 with neutral views on aviation).

**Marginally Compliant:** Marginally compliant aircraft means aircraft which are certified in accordance with limits laid down in Volume 1, Part II, Chapter 3 of Annex 16 to the Convention on International Civil Aviation signed on 7 December 1944 (the Chicago Convention) by a cumulative margin of less than 8 EPNdB (Effective Perceived Noise in Decibels) during a transitional period ending on 14 June 2020, and by a cumulative margin of less than 10 EPNdB following the end of that transitional period, whereby the cumulative margin is the figure expressed in EPNdB obtained by adding the individual margins (i.e. the differences between the certificated noise level and the maximum permitted noise level) at each of the three reference noise measurement points defined in Volume 1, Part II, Chapter 3 of Annex 16 to the Chicago Convention.

**Mediation Meetings:** Usually independently chaired these bring together representatives from groups with strongly differing views to develop acceptable solutions.

**On-line/virtual consultation events:** These allow the public to access the consultation material via a virtual tour remotely. These enable people to participate in the consultation if they are unable to attend an event, have restrictive mobility or are in recent times "lockdown due to pandemic.

**On-line publication and feedback:** Information made available on a website with a standardised feedback form. These are not staffed.

**Public Consultation Events:** Staffed events that are held in public places (e.g., Community Halls/Libraries) enabling full public access. Typically featuring display boards and documented materials explaining the issue being consulted on.

### Round of Action Planning

*First Round* - The noise mapping which took place in 2007 and the subsequent adoption of Action Plans in 2008 onwards.

*Second Round* - The noise mapping which took place in 2012 and the subsequent adoption of Action Plans in 2013 onwards.

*Third Round* - The noise mapping which took place in 2017 and the subsequent adoption of Action Plans in 2018 onwards.

*Fourth Round* - The noise mapping that will take place in 2022 and the subsequent action plans that will be prepared in 2024.

**Technical Expert Groups:** These are specialist groups comprised of experts and focused on finding solutions or options to a specific issue. (e.g., Airspace Design Proposals or Proposed Noise Management operational interventions might involve ANSPs, Airlines, Airports and Regulators).



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### 3. Description of the airport

1. Please, provide the following information about the Airport:

Name of the Airport

Country

Email contact of the  
Competent Authority  
responsible for the  
submission of the  
completed questionnaire  
for the airport

2. Is the airport privately owned and operated?

*Article 8 2002 END / Annex V*

- No
- Yes
- Other, please specify

3. In 2021, were Annual Movements expected to exceed 2017 levels [over the course of the current third round of action planning] without the COVID-19 impact?

*Article 8 2002 END/ ANNEX V Article 6 BAR 2014 ANNEX I*

- No
- Yes

4. In 2021, were annual passenger figures expected to exceed 2017 levels [over the course of the current third round of action planning] without the COVID 19 impact?

*Article 8 2002 END/ ANNEX V Article 6 BAR 2014 ANNEX I*

- No
- Yes

5. Are Annual Movements expected to return to the pre COVID-19 levels (2019) from 2022 over the course of the next fourth round of action planning?

*Article 8 2002 END/ ANNEX V Article 6 BAR 2014 ANNEX I*

- No
- Yes

6. Are annual passenger figures expected to return to the pre COVID-19 levels (2019) from 2022 over the course of the next fourth round of action planning?

*Article 8 2002 END/ ANNEX V Article 6 BAR 2014 ANNEX I*

- No
- Yes

7. What is the current fleet mix in terms of certificated noise levels (or their equivalent) over the course of 2021? Please insert integer values. Total must be 100.

*Article 8 2002 END/ ANNEX V Article 6 BAR 2014 ANNEX I*

% of marginally compliant Chapter 3 (or equivalent)

% of Chapter 3 (or equivalent)

% of Chapter 4 (or equivalent)

% of Chapter 14 (or equivalent)

% of other aircraft types (helicopters, small tourist aircraft, drones excluded)

8. Were there any major developments affecting the noise situation planned from 2017? [over the course of the current third round of action planning]? Details can be provided in the comment box.

*Article 8 2002 END/ ANNEX V*

- No  
 Yes

Please, provide details:

9. Were there any major developments affecting the noise situation before 2017? [over the course of the previous first and second round of action planning]? Details can be provided in the comment box.

*Article 5 2002 END ANNEX V*

- No  
 Yes

Please, provide details:

10. Were there any noise reduction measures in place before 2007 [prior to the first round of strategic noise mapping and action planning]?

*Article 5 2002 END ANNEX V*

- No  
 Yes

11. Were any airport developments already approved prior to the introduction of the END in mid-2006?

*Article 8 2002 END / ANNEX V*

- No  
 Yes

12. Were there any noise limit values in place prior to the first round of strategic noise mapping and action planning?

*Article 8 &10 2002 END ANNEX V & VI*

- No  
 Yes

13. Have Competent Authorities granted an exemption from noise operating restrictions for marginally compliant aircraft registered in developing countries?

*Article 9 BAR*

- No  
 Yes, but Competent Authorities of other Member States as and Commission were not informed of such exceptions  
 Yes, and Competent Authorities of other Member States as well as Commission were informed of such exceptions

14. Are noise abatement take-off and approach procedures set out in the Airport AIP?

Article 6 BAR 2014 ANNEX I

- No
- Yes

15. Do the major operators advise the airport of any upcoming fleet change from 2022 [over the course of the fourth round of action planning]?

Article 6 BAR 2014 ANNEX I

- No
- Yes

16. How is the fleet mix expected to change from 2022 [over the course of the fourth round of action planning] in terms of certificated noise levels (or their equivalent)? Please insert integer values. Total must be 100.

Article 6 BAR 2014 ANNEX I

% of marginally compliant Chapter 3 (or equivalent)

% of Chapter 3 (or equivalent)

% of Chapter 4 (or equivalent)

% of Chapter 14 (or equivalent)

% of other aircraft types (excluding helicopters, small touristic aircrafts, drones)

17. What is the **number of ATMs** considered in the last three rounds of END?

Article 8 2002 END/ANNEX V

ATMs

END R1 (2007)

END R2 (2012)

END R3 (2017)



18. What are the **numbers of people exposed to noise (Lden)** experienced around the airport reported in the last three rounds of END?

Article 8 2002 END/ANNEX V

	Number of people exposed to noise between $\geq 55 \text{ dB} < 65 \text{ dB Lden}$	Number of people exposed to noise between $\geq 65 \text{ dB} < 75 \text{ dB Lden}$	Number of people exposed to noise between $\geq 75 \text{ dB Lden}$	Does the number of people exposed include population in agglomerations?
END R1 (2007)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
END R2 (2012)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
END R3 (2017)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

19. What are the **Lden contour areas** reported in the last three rounds of END?

Article 8 2002 END/ANNEX V

	Contour Area in Km2 $\geq 55 \text{ dB Lden}$	Contour Area in Km2 $\geq 65 \text{ dB Lden}$	Contour Area in Km2 $\geq 75 \text{ dB Lden}$	Does the contour area include agglomerations?
END R1 (2007)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
END R2 (2012)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
END R3 (2017)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

20. What are the **numbers of people exposed to noise (Lnight)** experienced around the airport reported in the last three rounds of END?

Article 8 2002 END/ANNEX V

	Number of people exposed to noise between $\geq 50 \text{ dB} < 60 \text{ dB Lnight}$	Number of people exposed to noise between $\geq 60 \text{ dB} < 70 \text{ dB Lnight}$	Number of people exposed to noise between $\geq 70 \text{ dB Lnight}$	Does the number of people exposed include population in agglomerations?
END R1 (2007)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
END R2 (2012)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
END R3 (2017)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

21. What are the **Lnight contour areas** reported in the last three rounds of END?

Article 8 2002 END/ANNEX V

	Contour Area in Km2 $\geq 50 \text{ dB Lden}$	Contour Area in Km2 $\geq 60 \text{ dB Lden}$	Contour Area in Km2 $\geq 70 \text{ dB Lden}$	Does the contour area include agglomerations?
END R1 (2007)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
END R2 (2012)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
END R3 (2017)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

22. How often are Strategic Noise Mapping Contours (Lden, Lnight, Lday, Levening) produced?

*Article 7 2002 END/ ANNEX I Article 6 BAR 2014 ANNEX I*

- Annually
- Bi-annually
- Every 5 years
- Other, please specify

23. In addition to Lden and Lnight, what supplementary noise metrics are used to describe the noise situation at the airport?

*Article 5 2002 END/ ANNEX I*

- Leq,T (e.g. Lday, Levening, Leq,16hrs, Leq,8hr etc.)
- N above
- Overflights
- Others, please specify

- No supplementary noise metrics used

24. Are forecasts of future Strategic Noise Maps being produces?

*Article 7 2014 BAR / ANNEX IX*

- No
- Yes



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### 4. Designation of roles

25. With reference to END and **Noise Action Plan** (NAP), who is(are) the Competent Authority(ies) responsible for:

*Article 4 2002 END*

**Developing** the NAP

**Collecting** the NAP

**Implementing** the NAP

**Approving** the NAP

**Reporting** to the European Commission the NAP

26. With reference to END and **Strategic Noise Maps (SNP)**, who is(are) the Competent Authority(ies) responsible for:

*Article 4 2002 END*

**Developing** the SNP

**Collecting** the SNP

**Approving** the SNP

**Reporting** to the European Commission the SNP

27. With reference to BAR, please specify:

*Article 3 2014 BAR / Article 5 2014 BAR*

Who is the body/organization responsible for **developing** the **noise management measures** as per the ICAO Balanced Approach?

Who is the body/organization responsible for **approving** the **noise management measures** as per the ICAO Balanced Approach?

Who is the body/organization responsible for **applying** the **ICAO Balanced Approach**, ensuring that operating restrictions are not considered as first measure as per EU598/2014?

Who is(are) the Competent Authority(ies) responsible for **ensuring** the ICAO Balanced Approach **process is followed as set out in EU598/2014, if operating restrictions are to be considered?**

28. Have all the Competent Authorities designated under END and BAR in relation to the airport been identified in the questions above? If not, please specify the name of the missing Competent Authorities and their roles.

*Article 4 2002 END / Article 5 2014 BAR*

Yes

No, please specify

29. Has the European Commission been notified of the names and addresses of all the designated Competent Authorities?

*Article 3 2014 BAR*

No

Yes

30. How has the independence of the competent authorities been ensured?

*Article 3 2014 BAR*

31. Who determines whether a noise problem exists at the airport?

*Article 5 2014 BAR*

32. Who establishes the noise abatement objective(s) for the airport?

*Article 5 2014 BAR*

33. Who is the designated appeals body?

*Article 4 2014 BAR*



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5. END and BAR implementation into national/local legislation

34. Where END and BAR are implemented into the national/local legislation?

Please, state the national legislation and if available provide a web link:

National/local legislation implementing END

National/ local legislation implementing BAR

35. How does the national/local legislation relate to the END and BAR requirements?

	Implements the requirements	Complements the requirements	Exceeds the requirements	Other
END	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
BAR	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

If Other is selected, please specify

36. Are there any further national/local legislations that relate to airport noise management? if yes, please specify

- No
- Yes, please specify

37. How are Competent Authorities intending to implement the new directive 2020/367/EC?

*ANNEX III 2002 END amendment*



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### 6. Defining the noise problem

38. Has a noise problem been identified for the airport? If yes, can this be provided?

*Article 5 2014 BAR / Article 8 2002 END ANNEX V*

- No
- Yes, please specify

39. Has the noise problem been described in the Noise Action Plan?

*Article 5 2014 BAR / Article 8 2002 END ANNEX V*

- No
- Yes

40. What indicators/metrics are used to determine whether a noise problem exists?

*Article 5 2014 BAR / Article 8 2002 END ANNEX V*

- Contour Area
- Population Exposure to Noise Levels
- Harmful Effects (e.g. High Annoyance, High Sleep Disturbance or Ischaemic Heart Disease)
- Other, Please specify



41. How have the priorities/objectives been identified to address the noise problem?

*Article 5 2014 BAR / Article 8 2002 END ANNEX V*

42. How have both the need for an effective functioning transport system and protection of the environment been taken into account when determining priorities/objectives to address the identified noise problem?

*Para 1 2014 BAR*



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### 7. Setting the priorities / objectives

43. Please state the priority(ies) to be addressed by the current Noise Action Plan.

*Article 8 2002 END ANNEX V*

44. Is(are) the priority(ies) the same as the current Noise Abatement Objective(s)?

If not, please state the current Noise Abatement Objective(s)

- Yes, priorities and Noise Abatement Objective are the same
- No, Please state the current Noise Abatement Objective(s)

45. How have the priority(ies) and the current Noise Abatement Objective(s) been identified/quantified?

*Article 8 2002 END ANNEX V*

	Contour Area	Population Exposure to Noise Levels	Harmful Effects (e.g. High Annoyance, High Sleep Disturbance or Ischaemic Heart Disease)	Other(s)
Priority(ies)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Noise Abatement Objective(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If Other(s) is selected, please specify:

46. Do the priority(ies) and current Noise Abatement Objective(s) include specific time-bound targets? If so, what are they?

Article 8 2002 END ANNEX V

	No specific timeframe specified	By 2022 (within the current NAP round)	By 2028 (within the next NAP round)	Other(s)
Priority(ies)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Noise Abatement Objective(s)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

If Other(s) is selected, please specify:

47. When the priority(ies) and Noise Abatement Objective(s) are expected to be achieved?

Article 8 2002 END ANNEX V

	Not known	By 2022 (within the current NAP round)	By 2028 (within the next NAP round)	Other(s)
Priority(ies)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Noise Abatement Objective(s)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

If Other(s) is selected, please specify:

48. How often are the priority(ies) and Noise Abatement Objective(s) reviewed?

Article 8 2002 END ANNEX V

	Annually	Bi-annually	Every 5 years	Other(s)
Priority(s)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Noise Abatement Objective(s)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

If Other(s) is selected, please specify



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## 8. Assessment methodology of noise measures and operating Restrictions

49. If a cost-benefit analysis has been used to determine which **actions/noise measures under END and BAR** (which include operating restrictions) are to be proposed or implemented, please specify which of the following have been considered in the methodology:

2002 END ANNEX V

	To determine <b>Actions/Measures</b> under END	To determine <b>Measures, including Operating Restrictions</b> under BAR
Cost-benefit analysis not been used	<input type="checkbox"/>	<input type="checkbox"/>
Total costs of the noise measure(s) (Capital and/or operational costs)	<input type="checkbox"/>	<input type="checkbox"/>
Quantification and/or monetarisation of harmful effects (ie. High Annoyance, High Sleep Disturbance or Ischaemic Heart Disease)	<input type="checkbox"/>	<input type="checkbox"/>
Changes in the costs of real estate and/or land pricing or house/apartment rents (qualitatively, or quantitatively)	<input type="checkbox"/>	<input type="checkbox"/>
Valuation approaches i.e. willingness to accept as compensation for noise disturbance or willingness to pay to benefit from noise decrease	<input type="checkbox"/>	<input type="checkbox"/>
Cost of fuel or emissions including to aircraft operators on ground and in air	<input type="checkbox"/>	<input type="checkbox"/>
Costs of air pollution	<input type="checkbox"/>	<input type="checkbox"/>
Costs of climate change	<input type="checkbox"/>	<input type="checkbox"/>
Costs to nature and landscape	<input type="checkbox"/>	<input type="checkbox"/>
Accident/safety costs, including third-parties	<input type="checkbox"/>	<input type="checkbox"/>
Costs related to direct, indirect or catalytic employment and economic effects	<input type="checkbox"/>	<input type="checkbox"/>

Other, please specify

50. If a cost-effectiveness analysis has been used to determine which **actions/noise measures under END and BAR** (which include operating restrictions) are to be proposed or implemented, please specify which of the following have been considered in the methodology:

2002 END ANNEX V

	To determine <b>Actions/Measures</b> under END	To determine <b>Measures, including Operating Restrictions</b> under BAR
Cost-effectiveness analysis not been used	<input type="checkbox"/>	<input type="checkbox"/>
Total costs of the noise measure(s) (Capital and/or operational costs)	<input type="checkbox"/>	<input type="checkbox"/>
Change in the number of people exposed to noise levels at their dwellings with/without the use of the Noise Measure(s)	<input type="checkbox"/>	<input type="checkbox"/>
The safety of aviation operations, including third-party risks	<input type="checkbox"/>	<input type="checkbox"/>
The capacity of the airport	<input type="checkbox"/>	<input type="checkbox"/>
Any effects on the European aviation network	<input type="checkbox"/>	<input type="checkbox"/>
Changes in harmful effects (i.e.. High Annoyance, High Sleep Disturbance and Ischaemic Heart Disease) with/without the noise measure(s)	<input type="checkbox"/>	<input type="checkbox"/>
Environmental sustainability, including Interdependencies between noise and emissions	<input type="checkbox"/>	<input type="checkbox"/>
Any direct, indirect or catalytic employment and economic effects	<input type="checkbox"/>	<input type="checkbox"/>

Other, please specify

51. Which of the following harmful effects are assessed? Please justify your selection

2002 END ANNEX V

- High Annoyance
- High Sleep Disturbance
- Ischemic Heart Disease
- Other harmful effects
- Harmful effects not assessed

Please justify your selection

52. What indicators have been used in the methodologies to consider health, social and economics effects?

Article 6 2002 END/ANNEX III

53. Have Competent Authorities developed/provided any guidance on how to conduct the cost benefit/effectiveness assessment and what factors to consider?

No

Yes



## European Commission Study on Airport Noise Reduction

### 9. Identification of noise measures

Please indicate if the following measures have been implemented (or are planned to be) for this airport and when, or whether they have been considered for future implementations.

*Article 8 2002 END ANNEX V / Article 5 BAR 2014 / Article 6 BAR 2014 ANNEX I / BAR Article 5(2)*



54.

**At Source**

	<b>Not implemented</b> (and excluded from future implementation)	<b>Adopted pre 2007</b>	<b>Adopted post 2007</b> in one of the three END round	<b>Planned to be implemented</b>	<b>Considered</b> (for future implementation)	<b>Not yet considered</b> (but possible consideration in future)
Voluntary agreements for the complete phase out or removal during time sensitive periods of marginally compliant aircraft	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Voluntary agreements for the complete phase out or removal in time sensitive periods of specific aircraft (not defined as <u>marginally compliant</u> )	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Noise related airport charges based on the noise performance (i.e. operation/mode measured performance as dB expectation)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Noise related charges based on the noise certification (i.e. based on certificated noise levels)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Noise related charges based on other criteria (e.g. blend approach)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

If so, please specify the other criteria

55.

**Operational procedure (departure)**

	<b>Not Implemented</b> (and excluded from future implementation)	<b>Adopted pre 2007</b>	<b>Adopted post 2007</b> in one of the three END round	<b>Planned to be implemented</b>	<b>Considered</b> (for future implementation)	<b>Not yet considered</b> (but possible consideration in future)
Continuous climb procedures	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Minimum climb gradients	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Required use of NAPD 1 only	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Required use of NAPD 2 only	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Noise preferential routes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Alternation of the use of noise preferential routes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
PBN departure routes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Predictable and scheduled respite from overflight measures	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Preferential runway use for noise purposes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Airspace design restrictions (e.g. not below heights over sensitive receptors)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Noise limits and fines	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

### Operational procedure (arrival)

	Not Implemented (and excluded from future implementation)	Adopted pre 2007	Adopted post 2007 in one of the three END round	Planned to be implemented	Considered (for future implementation)	Not yet considered (but possible consideration in future)
Continuous Descent Approach	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Low Power Low drag approaches	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Landing gear deployment measures	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Steeper Approaches (more than 3 degrees)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
PBN arrival routes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Predictable and scheduled respite from overflight measures	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Preferential runway use	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Noise limits and fines	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Airspace design restrictions (e.g. not below specified heights over sensitive receptors)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

57.

### Land Use Planning

	<b>Not Implemented</b> (and excluded from future implementation)	<b>Adopted pre 2007</b>	<b>Adopted post 2007</b> in one of the three END round	<b>Planned to be implemented</b>	<b>Considered</b> (for future implementation)	<b>Not yet considered</b> (but possible consideration in future)
Building codes or planning guidance (including prohibiting construction of new buildings) in place to avoid or reduce the noise impact on sensitive land uses	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stakeholders consultation in regard of new developments in noise sensitive areas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Monitoring / reporting of sensitive land use (e.g. residential housing) encroachment within the END contours	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Relocation assistance measures for most sensitive areas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Noise Insulation Schemes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

If so, please specify details of the noise insulation scheme

58.

### Operating Restrictions

	<b>Not Implemented</b> (and excluded from future implementation)	<b>Adopted pre 2007</b>	<b>Adopted post 2007</b> in one of the three END round	<b>Planned to be implemented</b>	<b>Considered</b> (for future implementation)	<b>Not yet considered</b> (but possible consideration in future)
Night Flight Restrictions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mandatory Time based restrictions on marginally compliant aircraft	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mandatory Phase out of marginally compliant aircraft	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Runway restrictions by aircraft type	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Runway restrictions by time of the day	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Runway restriction by operating mode	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Operating time restrictions by aircraft type	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	<b>Not Implemented</b> (and excluded from future implementation)	<b>Adopted pre 2007</b>	<b>Adopted post 2007</b> in one of the three END round	<b>Planned to be implemented</b>	<b>Considered</b> (for future implementation)	<b>Not yet considered</b> (but possible consideration in future)
Operating time restrictions by runway	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Operating time restrictions by routes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Route restriction by aircraft type	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Route restrictions by runway	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Route restrictions by time of the day	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cap on aircraft movements in place [follow up if just for a specific time period/day/night etc]	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Noise quota(budget) limits/cap in place [follow up if just for a specific time period/day/night etc]	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Partial restrictions in place that draw a distinction between daytime and night time measures	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Noise contour cap	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Voluntary restrictions (e.g. agreement not to land before specified time, trials, Charters, joint initiatives)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

If selected, please provide details of:

- Noise Contour Caps
- Voluntary Restrictions

59.

**Other**

	<b>Not implemented</b> (and excluded from future implementation)	<b>Adopted Pre 2007</b>	<b>Adopted post 2007</b> in one of the three END round	<b>Planned to be implemented</b>	<b>Considered</b> (for future implementation)	<b>Not yet considered</b> (but possible consideration in future)
Relocation of the airport/runways	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relocation of traffic to another airport	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relocation of passengers to other modes of transport	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Protection/designation of Quiet Areas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please specify any other noise measures implemented/planned/considered at the airport

60. When selecting measures, please describe what is understood by "the measures, taking into account public interest in the field of air transport as regards the development prospects of their airports, are selected without detriment to safety".

*BAR Article 5(2)*



## European Commission Study on Airport Noise Reduction

### 10. Consultation and engagement

**61. Transparency** - Are the results of the strategic noise maps and noise action plans made available to the public?

*Article 8/9 / ANNEX IV 2002 END*

- No  
 Yes

**62. Transparency** - Where are noise strategic maps and noise action plans available to the public? Please specify where (eg: link to website, etc).

*Article 8/9 / ANNEX IV 2002 END*

**63. Technical Cooperation** - Has there been technical engagements with airport operator, aircraft operators, air navigator service provider?

*Article 6 BAR 2014 2(d)*

- No  
 Yes

64. **Consultation** - Which of the following methods of consultation and engagement has been used in developing the noise actions plans or implementing an operating restriction? A definition of each method can be found [here](#)

Article 6 BAR 2014

	Residents	Community Groups	Business	Airport Operators	Aircraft Operators	Aircraft/engine manufactures	Air Navigation Providers	Network Manager
Public Consultation Events	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
On-line/virtual Consultation Events	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
On-line publication and feedback	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Focus Groups	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mediation Meetings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Consultative Committee Groups	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
121 Stakeholder briefings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Technical Expert Groups	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Other, please specify



**65. Promotion** - Which of the following methods have been used in promoting stakeholder engagement and interest in the development of noise actions plans or implementing an operating restriction?

Article 6 BAR 2014

	Residents	Community Groups	Business	Airport Operators	Aircraft Operators	Aircraft/Engine manufacturers	Air Navigation Providers	Network Manager
National Published Media	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Local Published Media	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Competent Authority Responsible Website	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Airport Operator Responsible Website	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Radio Advertisements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Television Media	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Leaflets in community centres (e.g. library's, council offices)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Email communication	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Postal communication	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Other, please specify

**66. How is public informed of decision taken within action plans as result of the consultation process?**

Article 6 BAR 2014



## European Commission Study on Airport Noise Reduction

### 11. Resolution and review

67. How is progress against the Action plan reviewed?

*Article 11 END 2002*

68. How is the success of the action plan measured?

*Article 11 END 2002*

69. Is there an independent audit of progress reports?

*Article 11 END 2002*

No

Yes

70. How are disputes resolved?

*Article 4 BAR 2014*

71. How often is the action plan reviewed?

*Article 11 END 2002*

- Annually
- Bi-annually
- Every 5 years
- Other, please specify

72. How do Competent Authorities follow up and monitor the implementation of the operating restrictions and take appropriate actions?

*BAR 2014*



## European Commission Study on Airport Noise Reduction

### 12. Overview

73. How successful has the implementation of the END been in supporting efforts to reduce harmful effects?

Very Unsuccessful      Unsuccessful      Fair      Successful      Very Successful



Please, motivate your score

74. How could the END be improved?

75. How successful BAR has been in balancing the protection of citizen's health while ensuring an effective transport system?

Very Unsuccessful      Unsuccessful      Fair      Successful      Very Successful



Please, motivate your score

76. How could the BAR be improved?



## European Commission Study on Airport Noise Reduction

### 13. Interview

77. Which of the topics in this questionnaire would you be interested to further discuss in an interview?

- Section 4: Designation of the roles
- Section 5: END and BAR Implementation into nation/local legislation
- Section 6: Defining the noise problem
- Section 7: Setting the priorities / objectives
- Section 8: Assessment methodology of noise measures
- Section 9: Identification of noise measures
- Section 10: Consultation / Engagement
- Section 11: Resolution and Review