Amended Proposal for a

DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

on the establishment of a Community framework for noise classification of civil subsonic aircraft for the purposes of calculating noise charges

(presented by the Commission pursuant to Article 250(2) of the EC-Treaty)
EXPLANATORY MEMORANDUM

1. PROCEDURE

The Proposal COM(2001) 74 final of 20 December 2001 was submitted to the Council and the European Parliament on 20 December 2001 in accordance with the procedure laid down in article 251 of the Treaty.

The Economic and Social Committee gave its opinion on 29 May 2002\(^1\).

The European Parliament gave its opinion in first reading during the session of 3 September 2002 and adopted 12 amendments.\(^2\)

In the light of the development in the European Parliament the Commission has drafted this amended proposal.

2. PURPOSE OF THE PROPOSAL

In the 1999 Communication on Air Transport and Environment it was proposed to use economic incentives to encourage operators to use technology that allows to improve the environmental impact of air transport.

In that light the objective of this Proposal is to provide a common methodology for the modulation of airport charges, taking into account the level of noise nuisance caused by specific aircraft.

The technical elements of the Proposal reflect the European Civil Aviation Conference (ECAC) recommendation on noise charges. By establishing a Community wide system based on transparency, fairness of treatment and predictability, a proliferation of charging systems based on different technical parameters throughout the territory of the Community can be avoided, thus supporting internal market goals.

The main underlying principles of the proposed methodology are:

- transparency and cost-relatedness in accordance with established ICAO policy, which implies the application of the principle of revenue neutrality, unless charges are levied with the specific purpose of financial environmental mitigation measures at and around airports

- use of objective criteria which are readily available and easily verifiable (noise performance of the aeroplane as mentioned in its noise certificate)

- proportionality between noise charges and noise impact

- flexibility by taking into account a number of airport specific elements with a view to allow a smooth introduction of the harmonised methodology.

---

\(^1\) OJ C 221, 17.9.2002, p.17
\(^2\) ...
The Proposal responds to the obligation of the Community to promote sustainable
development of economic activities as well as an improvement of the quality of the
environment by integrating environmental protection requirements into common
sectoral policies.

3. **COMMENTS**

On 3 September 2002 the European Parliament adopted in first reading 12
amendments. The Commission examined all those amendments in the light of their
possible effect on:

- the objectives and principles of the Proposal as set out under point 2 above;
- the technical integrity of the proposed methodology;
- new European legislation adopted since the submission of the Proposal to

Out of the 12 amendments five are accepted by the Commission (amendments 1, 5,
7, 12 and 14).

The remaining amendments cannot be accepted (amendments 4, 8, 9, 10, 15, 16 and
17).

3.1 **Amendments adopted by the European Parliament which are accepted by the
Commission**

- The Commission accepts amendment 1, which changes the title of the Proposal.
  By deleting the reference to “noise classification” the title of the Proposal
  reflects more accurately the proposed methodology which is based on a
  continuous formula and not on a discrete classification of aeroplanes.

- The Commission accepts amendment 5, which besides a few linguistic changes
  modifying Article 3.1, refers to the possibility to use different unit noise charges
  for different times of the day. Although this was already implicitly included in
  the methodology, which is described in Annex 1 to the original Proposal, this
  addition to Article 3 improves the clarity of the text.

- The Commission accepts amendment 7, which postpones in Article 4, the
  proposed date of 1 April 2003 by one year to 1 April 2004 in Article 4. In the
  light of the time that has already elapsed since the adoption of the proposal by
  the Commission, and also with a view to the workprogramme of the Council for
  the near future, this amendment introduces a more reasonable timing for the first
  implementation phase of the Directive.

- The Commission accepts amendment 12, modifying recital 6, which merely
  confirms that the Proposal is fully compatible with relevant ICAO guidelines.

- The Commission accepts amendment 14, modifying Article 3.3, which puts in
  place two new elements: in the first place, its limits the number of time periods
  in a 24 hour frame to a maximum of three and secondly, it increases the
  maximum variation between the highest and the lowest charge within a given
  time period to a ratio of 1 to 40. Limiting the number of time periods to three,
compensates for the possible effect of doubling the ratio to 1-40. The amendment establishes also compatibility with the environmental noise Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise, which uses also three time periods (day, evening, night).

3.2 Amendments adopted by the European Parliament which are rejected by the Commission

- **Amendment 4**, modifying Article 2 paragraph 1, point (b) is rejected because it would add no new elements to the Proposal and it might, on the contrary, reduce the clarity of the proposed draft. It would not make sufficiently explicit that the so-called concept of modulation of charges must not only be implemented in the case of a revenue neutral framework, but also in the case net revenue is raised for financing environmental mitigation measures.

- **Amendment 8**, modifying Article 7, paragraph 1, cannot be supported as it requests the Commission to prepare a report on the feasibility of replacing the proposed system by a system based on noise measurement. Whilst a methodology based on noise measurement in situ cannot guarantee sufficient transparency, such a study would be superfluous.

- **Amendment 9**, amending the Annex, paragraph 2, introduces a minimum noise charge. Because airports without noise problems do not need to take measures to reduce or to limit noise, there is no good reason to make minimum noise charges mandatory.

- **Amendment 10**, amending the Annex, Modulation of noise charges, is rejected because it would introduce an obligation to raise revenue from noise charges also at airports with very low noise levels, which would be contrary to an important principle enshrined in the Proposal.

- **Amendments 15, 16 and 17**, amending Recital 9 Article 1 paragraph 2 and Article 4 paragraph 2, cannot be accepted because they go against the main objective of the proposal, which is to bring a minimum harmonisation.

4. **Conclusion**

In the light of the amendments adopted by the European Parliament the Commission amends its proposal as set out above, pursuant to Article 250(2) of the EC Treaty. Further to the five amendments which are accepted, a small technical modification is made in the Annex.

This modification is necessary as a consequence of amending Article 3 by doubling the range between minimum and maximum charges at a particular airport from 1 – 20 to 1 – 40.

Consequently – for the sake of consistency – it is necessary to adapt, in the description of the calculation of noise charges in the Annex, the lower threshold levels. These were defined as being 13 dB below the upper threshold and are adjusted to 16dB below the upper threshold.
Proposal for a

DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

on the establishment of a Community framework for noise charges on civil subsonic aircraft

(Text with EEA relevance)

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community, and in particular Article 80 (2) thereof,

Having regard to the proposal from the Commission,

Having regard to the opinion of the Economic and Social Committee,

Having regard to the opinion of the Committee of the Regions,

Acting in accordance with the procedure laid down in Article 251 of the Treaty,

Whereas:

(1) It is part of Community policy, in conformity with Articles 2 and 6 of the Treaty, to enhance significantly the integration of environmental protection requirements into other sectoral policies, including transport policy.

(2) One of the main objectives of the common transport policy is to promote the sustainable development of transport activities.

(3) The Commission Communication on Air Transport and Environment proposes the use of economic instruments in order to improve the environmental performance of air transport operations.

(4) Directive on airport charges provides for the possibility to modulate airport charges as a function of the environmental impact without establishing criteria for such modulation.

(5) A modulation of noise charges for environmental purposes based on a common classification of aircraft according to their noise impact will enhance environmental

---

3 OJ C 103, 30.04.2002, p 221
4 OJ C 221, 17.09.2002 p 17
5 OJ C , p.
6 OJ C , p.
effectiveness, transparency of charging systems and predictability for air transport operators.

(6) Such modulation is not designed to generate additional revenue. It should respect the principle of revenue neutrality and be applied in a transparent and non-discriminatory manner. **However, environmental charges that are levied with the specific purpose of financing environmental mitigation measures in the area surrounding airport, such as sound insulation for example, are compatible with current ICAO charging principles and should thus be allowed under this Directive.**

(7) The certificated noise levels as defined in Annex 16 - Volume I to the Convention on International Civil Aviation, third edition, July 1993 are considered to reflect adequately the noise impact for the population living in the vicinity of airports. The noise level at arrival can be adequately characterised by the certificated noise level at the approach measurement point as defined in the said Annex 16, for the noise level at departure there is a good correlation with the average of the certificated noise level at the sideline and flyover measurement point as defined in the said Annex 16.

(8) Noise charges should be proportional to the incremental nuisance for human beings caused by individual aircraft separately at arrival and departure. The relationship between this incremental nuisance and the aircraft noise level can be most adequately reflected by the noise energy level.

(9) In order to ensure maximum transparency between noise charging systems at Community airports, the common framework for noise classification of aircraft should after a suitable transition period be applied by airports which operate commercial flights between Member States provided that they levy noise charges.

(10) It is useful to ensure a better understanding of the concept of noise productivity, in particular for the heavier aircraft, by providing additional information about the noise output per unit transported.

(11) The Directive is in accordance with the principles of subsidiarity and proportionality as set out in Article 5 of the Treaty, since the objective of enhancing the environmental effectiveness of noise charges cannot be sufficiently achieved by Member States, because various systems of noise classification are used for charging purposes. The objective can therefore, be better achieved by the Community by way of a harmonised framework for the calculation of noise charges. The Directive confines itself to the minimum required in order to achieve this objective and does not go beyond what is necessary for that purpose.

(12) Since the measures necessary for the implementation of this Directive are measures of general scope within the meaning of Article 2 of Council Decision 1999/468/EC of 28 June 1999 laying down the procedures for the exercise of implementing powers conferred on the Commission, they should be adopted by use of the regulatory procedure provided for in Article 5 of that decision.

(13) The Commission should carry out by 1 April 2008 an evaluation of the implementation of this Directive.

---

9 OJ L 184, 17.7.1999, p. 23
HAVE ADOPTED THIS DIRECTIVE:

Article 1

Objectives and Scope

The aim of this Directive is to enhance the environmental effectiveness of noise charges levied at airport level by ensuring that common criteria based on the noise performance of aircraft are used when calculating the level of these charges for environmental purposes.

This Directive applies in accordance with the provisions set out in Article 4 to airports or airport systems which operate commercial flights between Member States and which are located in the territory of a Member State, provided that noise charges are applied.

Article 2

Definitions

1. For the purpose of this Directive:

   (a) “noise charge” means a specific noise levy by the airport, related to the certificated noise characteristics of the aircraft, which is designed to recover the costs of alleviation or prevention of noise problems and to encourage the use of less noisy aircraft.

   (b) “modulation” means that within a globally revenue neutral framework there can be differentiation in the level of noise charges applied.

   (c) “La” means the noise level of an aircraft at arrival. It is equal to the value of the certificated noise level expressed in Effective Perceived Noise (EPN) decibels at the approach measurement point and calculated as defined in Annex 16 - Volume 1 to the Convention on International Civil Aviation, third edition, July 1993. The related noise energy is equal to the antilogarithm La/10.

   (d) “Ld” means the noise level of an aircraft at departure. It is equal to the arithmetic average (mean) of the certificated noise levels expressed in EPN decibels at the lateral and flyover measurement points as defined in the said Annex 16. The related noise energy is equal to antilogarithm Ld/10.

   (e) ‘noise productivity of an aircraft’ means the noise emissions per unit of payload: passenger or tonne of cargo,

2. In accordance with the procedure laid down in Article 6(2), Article 2 (c) and (d) of this Directive may be adapted, in order to apply, for the purpose of this Directive, subsequent amendments to Annex 16, Volume 1 to the Convention on International Civil Aviation, which enter into force after the adoption of this Directive.
Article 3

Common framework for the calculation of noise charges

Member States shall take the necessary measures to ensure that the calculation of noise charges at airports in their territory is based on the following criteria:

(1) The noise charge for arrivals and departures shall correspond to the relative noise impact of arrivals and departures for populations around airports. The noise charge for an arrival and a departure at a given airport shall be calculated as set out in the Annex to this Directive. Different unit charges for different times of the day shall be permitted.

(2) The calculation of the noise energies at arrival and departure shall be based on the noise levels $La$ and $Ld$.

(3) The modulation of noise charges within a given part of a 24-hour period be limited to a ratio of 40 being the maximum variation between the highest and the lowest noise charge. A lower ratio may be applied.

(4) For the purposes of subparagraph 3, each 24 hour period may be subdivided into a maximum of three periods (day, evening and night).

Article 4

Application of the common framework

Member States shall take the necessary measures to ensure that the common framework for the calculation of noise charges is applied:

(1) As from 1 April 2004

   (a) in any significant revision of existing systems of noise charges

   (b) for newly introduced systems of noise charges.

(2) As from 1 April 2006 to any system of noise charges.

Article 5

Information to the public

In order to ensure that the concept of noise productivity is well understood, Member States or airports authorities may complement the noise characteristics of aircraft $La$ and $Ld$ used for the calculation of noise charges by additional information reflecting the noise productivity of an aircraft, in particular for aircraft with a maximum take-off weight of more than 34 tonnes.
Article 6

Regulatory Committee

1. The Commission shall be assisted by the Aviation Safety Regulations Committee set up by Council Regulation (EEC) n° 3922/91 of 16 December 1991, composed of representatives of Member States and chaired by the representative of the Commission (hereinafter referred to as “the committee”).

2. Where reference is made to this paragraph, the regulatory procedure laid down in Article 5 of Decision 1999/468/EC shall apply, in compliance with Article 8 thereof.

3. The period provided for in Article 5(6) of Decision 1999/468 shall be three months.

Article 7

Review and reporting

The Commission shall submit to the European Parliament and the Council a report based on experience on the application of this Directive not later than 1 April 2008.

The report shall be accompanied, as appropriate, by proposals to amend this Directive.

Article 8

Transposition

Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive by one year after its entry into force at the latest. They shall forthwith inform the Commission thereof.

When Member States adopt those provisions, they shall contain a reference to this Directive or be accompanied by such a reference on the occasion of their official publication. Member States shall determine how such reference is to be made.

Article 9

Entry into force

This Directive shall enter into force on the twentieth day following that of its publication in the Official Journal of the European Communities.

---

Article 10

Addressees

This Directive is addressed to the Member States.

Done at Brussels,

For the European Parliament
The President

For the Council
The President
ANNEX

- **Calculation of noise charge**

The total noise charge for one arrival and one departure at a given airport is:

\[ C = Ca.10^{(La - Ta)/10} + Cd.10^{(Ld - Td)/10} \]

where:

- \( Ca \) and \( Cd \) are the unit noise charges at departures and arrivals for the considered airport. \( Ca \) and \( Cd \) can be equal to zero. They reflect the relative importance of noise emissions at arrivals and departures for the impacted population;
- \( La \) is the certificated noise level at approach;
- \( Ld = (Lf + Li)/2 \), \( Lf \) and \( Li \) are the certificated noise levels at the flyover and lateral measurement points; and
- \( Ta \) and \( Td \) are noise thresholds at departures and at arrivals corresponding to categories of relatively quiet aircraft for the considered airport. These thresholds are fixed around 16 decibels below upper thresholds corresponding to 95% of the noise energy emitted at the airport as indicated on the graph.

![Cumulated noise energy at departure for movements with noise levels \( \leq L \)](image)

**Modulation of noise charges**

According to the principle that charges should be based as closely as possible on underlying costs, there should be specific noise charges for financing noise mitigation programmes and other noise charges should be compensated by negative noise charges (rebates) in order to be revenue neutral.
This revenue neutrality should be achieved separately at departure and at arrival. For instance, at departure the noise charge (positive or negative) should be for the aircraft $i$

$$C_i = C_d \cdot [E_d i - 1/N \cdot \Sigma E_d j]$$

where

$C_d$ is the unit charge for departure at the considered airport

$E_d i$ is the relative noise energy at departure for the aircraft which is considered; and

$N$ and $\Sigma E_d j$ are the forecast number of departures and the forecast cumulated noise energy at departure during the year, which is considered.

$C_i$ can be positive or negative.