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Guidance on Aircraft Emissions Charges Related to Local Air Quality

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AMENDMENTS

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RECORD OF AMENDMENTS AND CORRIGENDA

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Chapter 1

SCOPE OF GUIDANCE AND APPLICATION OF EXISTING ICAO POLICIES ON AIRCRAFT EMISSIONS CHARGES RELATED TO LOCAL AIR QUALITY

1.1 INTRODUCTION AND BACKGROUND

1.1.1 In the context of emissions-related levies, the 35th Assembly of ICAO recognized the continued validity of the Council's Resolution of 9 December 1996 on Environmental Charges and Taxes which applies to emissions in general. It also requested that the ICAO Council develop further guidance on emissions levies related to local air quality.

1.1.2 This guidance was developed to respond to this Assembly request. It is intended to assist those States that have decided to levy emissions charges on aircraft with respect to aircraft emissions that have local air quality effects. Specifically, this guidance addresses how to implement such charges consistent with ICAO policy. It should be noted that the guidance is not of a regulatory nature. Rather, it provides States with advice and information that they may need or find helpful. This guidance cannot, and does not purport to, cover every conceivable issue that might arise; indeed ICAO recognizes that States have their own legal obligations, existing agreements, current laws and established policies. States should therefore exercise discretion in applying this guidance to their specific circumstances.

1.2 SCOPE OF THE GUIDANCE AND KEY TERMS

1.2.1 Consistent with the remit to develop guidance on implementing local emissions charges, this guidance addresses only such charges. ICAO has an environmental goal to limit or reduce the impact of aviation emissions on local air quality. Charges are but one potential means for addressing aircraft emission issues. The Assembly requested the Council "to continue to study policy options to limit and reduce the environmental impact of aircraft engine emissions placing special emphasis on the use of technical solutions while continuing its consideration of market-based measures" (Assembly Resolution A35-5, Appendix H, Action Clause 2b)). Further, when market-based measures such as emissions charges are adopted, States are encouraged "to evaluate the costs and benefits of the various measures, including existing measures, with the goal of addressing aircraft engine emissions in the most cost-effective manner" (Assembly Resolution A35-5, Appendix I, Action Clause 2). Thus, for purposes of this guidance, it is assumed that a State (or its delegate) that has chosen to proceed with a local emissions charge on aircraft already has considered a range of options and has carried out a cost-effectiveness analysis and that the State is in the implementation stage for such a measure. By providing this guidance, ICAO does not mean to promote the use of emissions charges. However, it provides this guidance to promote consistency in approaches among those States that have decided to employ such charges.

1.2.2 While this guidance focuses on implementation of a local emissions charge, it may also be of assistance to those States (or their delegates) that are in the earlier stage of considering whether to proceed with a local emissions charge, as compared to other options. In such a case, the State (or its delegate) could use the guidance to assist in its consideration of a potential charges measure.

1.2.3 The following terms are defined in the context of this guidance.

- a) *Aircraft emissions with local air quality effects.* For the purposes of this guidance, aircraft emissions with local air quality effects are defined as those aircraft emissions generated in the vicinity of an airport by aircraft either arriving or departing from that airport. The aircraft emissions include those generated from aircraft main engines either on the ground or in the air up to a level deemed to have local effect, as defined by the jurisdiction where the emissions are released. The aircraft pollutants of concern for these purposes are those gaseous emissions currently controlled for certification of aircraft engines under Annex 16, Volume II, including oxides of nitrogen (NO_x), carbon monoxide (CO), and hydrocarbons (HC). It is also recognized that secondary pollutants and particulate matter (PM) emissions from aircraft may have local effect and are a source of continuing research and evolving scientific understanding. To the extent that this research and understanding develops so as to allow ICAO to conclude that: 1) a new standard for direct emissions from aircraft engines is warranted or 2) a causal relationship can be demonstrated from direct emissions of precursors, then the directly emitted pollutant(s) may also be identified as an aircraft emission of concern for purposes of this emissions charging guidance.
- b) ICAO recognizes that different States may have different standards or thresholds for designating whether a pollutant as emitted has local effect. In many cases, this is expressed in terms of a maximum altitude up to which a particular pollutant is emitted. Some States may specify a specific altitude for such purposes. Others may direct that modelling be undertaken to identify the altitude at which pollutants may have local effect in a particular area, often referred to as the "mixing height" within the atmospheric "boundary layer". In basic terms, the "mixing height" is the height of the vertical mixing of the air and suspended particles above the ground within the atmospheric boundary layer. Also in basic terms, the "boundary layer" is that part of the troposphere that is directly influenced by the presence of the earth's surface. States that specify a mixing height be determined for purposes of local air quality assessment typically have accepted models for such analyses and/or specify a default height for the mixing height, such as 3 000 feet.
- c) *Local emissions charge for aircraft.* ICAO defines a charge as "a levy that is designed and applied specifically to recover the costs of providing facilities and services for civil aviation" (Doc 9082/7 and Assembly Resolution A35-5, Appendix I). In the context of aircraft emissions with local air quality effects, a local emissions charge for aircraft is a levy (or fee) that is designed and applied specifically to prevent or mitigate environmental impact to local air quality caused by and directly attributable to civil aircraft operations.
- d) *Tax.* ICAO defines a tax as "a levy that is designed to raise national or local government revenues which are generally not applied to civil aviation in their entirety or on a cost-specific basis" (Assembly Resolution A35-5, Appendix I).

1.3 EXISTING ICAO POLICIES ON CHARGES

1.3.1 To the extent that local emissions charges are to be levied on international flights, those charges should be consistent with ICAO policies on charges. The policies that are particularly relevant to emissions charges are enumerated in this section of the guidance. These policies have been culled from the ICAO Council Resolution on Environmental Charges and Taxes (adopted 9 December 1996) (referred to in this guidance as "Council Resolution"), Assembly Resolution A35-5, *Consolidated Statement of Continuing ICAO Policies and Practices Related to Environmental Protection* (referred to in this guidance as "A35-5"), and *ICAO's Policies on Charges for Airports and Air Navigation Services* (Doc 9082/7) (referred to in this guidance as "ICAO's Policies"). Before implementing an aircraft emissions local emissions charging scheme, a State (or its delegate) should confirm that the scheme is consistent with these policies.

1.3.2 *Take into account the interests of all parties concerned.* When market-based emissions measures, such as charges, are adopted, Contracting States are encouraged “to take into account the interests of all parties concerned...” *Source:* A35-5, Appendix I, 2nd Action Clause.

1.3.3 *Non-discrimination.* The ICAO Council urges “States that are considering the introduction of emissions-related charges to take into account the non-discrimination principle in Article 15 of the Convention on International Civil Aviation...” *Source:* Council Resolution, 5th Action Clause. “Charges must be non-discriminatory both between foreign users and those having the nationality of the State in which the airport is located and engaged in similar international operations, and between two or more foreign users.” *Source:* ICAO’s Policies, Paragraph 23(iv).

1.3.4 *Take into account the potential impacts on the developing world.* When market-based measures, such as emissions charges, are adopted, Contracting States are encouraged “to take into account the potential impacts on the developing world...” *Source:* A35-5, Appendix I, 2nd Action Clause. In light of the non-discrimination provision in Article 15 of the Chicago Convention, the way in which the potential impacts on the developing world are taken into account must not discriminate on the basis of State of Registry. This may or may not preclude the possibility of exemptions or waivers based on technical criteria, a transitional approach or a phased implementation. An example of a technical approach for taking into account the potential impacts on the developing world without running afoul of the non-discrimination requirement might be to exempt *de minimis* operations into an airport from the charging scheme. Operators from developing States may be able to benefit from *de minimis* exemptions, to the extent they may have fewer operations into a particular airport than operators from developed States. Nonetheless, because any operator from any State could take advantage of a *de minimis* exemption if its operations were below the threshold, such a scheme would not be discriminatory based on State of Registry.

1.3.5 *Transparency.* Charging authorities are urged to “Ensure transparency as well as the availability and presentation of all financial data required to determine the basis for charges.” *Source:* Doc 9082/7, Paragraph 15(iii).

1.3.6 *Cost-basis.* “States that are considering the introduction of emissions-related charges” are urged to take into account the principle that “the charges should be related to costs”. *Source:* Council Resolution, 5th Action Clause. Further, “charges should be based on the costs of mitigating the environmental impact of aircraft engine emissions to the extent that such costs can be properly identified and directly attributed to air transport”. *Source:* A35-5, 10th “Whereas” Clause.

1.3.7 *Cost-effective measures.* When market-based measures, such as emissions charges, are adopted, States are encouraged “to evaluate the costs and benefits of the various measures, including existing measures, with the goal of addressing aircraft engine emissions in the most cost-effective manner...” *Source:* A35-5, Appendix I, 2nd Action Clause.

1.3.8 *Minimize competitive distortion.* “States that are considering the introduction of emissions-related charges” are urged to take into account the principle that “the charges should not discriminate against air transport compared with other modes of transport”. *Source:* Council Resolution, 5th Action Clause. In addition, authorities are urged to “Ensure there is no overcharging or other anti-competitive practice or abuse of dominant position.” *Source:* Doc 9082/7, Paragraph 15(ii).

1.3.9 *No fiscal aims.* “States that are considering the introduction of emissions-related charges” are urged to take into account the principle that “there should be no fiscal aims behind the charges”. *Source:* Council Resolution, 5th Action Clause.

1.3.10 *Charges, rather than taxes.* The ICAO Council “Strongly recommends that any environmental levies on air transport which States may introduce should be in the form of charges rather than taxes...” *Source:* Council Resolution, 4th Action Clause.