# EU-høring om politiske optioner for markedsbaserede virkemidler til reduktion af international luftfarts klimabelastning

# Consultation on the policy options for market-based measures to reduce the climate change impact from international aviation

This document has been prepared by the Commission services for consultation purposes. It is addressed to stakeholders and experts in the field of aviation or climate change with the objective of collecting experiences, suggestions and opinions related to international and EU policies tackling climate change impacts from international aviation emissions through market-based measures (MBMs). The consultation seeks input on questions concerning the problem to be tackled and policy options currently being developed at the International Civil Aviation Organisation (ICAO) and with respect to the EU's emissions trading system (EU ETS).

# The importance of global action on aviation emissions

The aviation sector has a strong international character. Carbon dioxide (CO) emissions from international aviation are expected to grow by at least 250% from 2005 levels by 2050. A global approach to addressing these rapidly growing emissions would be the preferred and most effective way of reducing these emissions.

The international community reached a landmark climate agreement in Paris in December 2015, which affirms Parties' commitment to hold the increase in the global average temperature to well below 2°C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5°C. The Paris Agreement requires all anthropogenic emission sources to be addressed to reach a global peaking of greenhouse gas emissions (GHG) as soon as possible and to undertake rapid reductions thereafter so as to achieve a balance between emissions by sources and removals by sinks in the second half of the century. This significant mitigation effort entails taking firm action on all emission sources, including aviation.

While acting through the EU ETS since 2008, the EU remains committed to seeking multilateral progress to address international aviation emissions. For more than 15 years, the EU has been involved in the discussions aimed at tackling aviation emissions through a global agreement. These discussions have been carried out under the United Nations, in particular at the ICAO.

#### The inclusion of aviation into the EU ETS

The EU action to address aviation emissions through a comprehensive approach includes facilitating and improving operational and technological developments. However, it is recognised that, faced with significant growth in air traffic worldwide, these measures alone will not be sufficient to achieve meaningful mitigation goals. Given that marginal abatement costs in the sector are generally high and the scope of technical measures available to slow the growth of emissions from aviation is limited, MBMs are a relatively low-cost and attractive choice for aviation. The EU ETS was the first market-based measure covering aviation, but other jurisdictions around the world (e.g. Republic of Korea, China (Shanghai)) are following a similar approach, and more may follow.

As reaffirmed by the European Council in October 2014, the EU ETS is the cornerstone of the EU policy tools for reducing greenhouse gas emissions and thus will be one of the key policy instruments to deliver the EU's commitment for a 40% economy-wide reduction of GHG by 2030. EU ETS sets a mandatory cap on emissions from the sectors included. Companies within these sectors need to cover their emissions with allowances provided by governments for free or through auctioning. Participants can trade their allowances among each other. This facilitates cost effective emissions reductions.

The European Parliament and the Council adopted legislation that entered into force early 2009, making airlines liable for their emissions from 2012. The legislation applies to EU and non-EU airlines alike. Emissions from flights to and from Iceland, Liechtenstein and Norway (European Economic Area, EEA) are also covered. In this way the aviation sector contributes to the economy-wide emissions targets the EU has in place for 2020 and 2030. The EU ETS, thus, covers emissions from both domestic (within a country) and international (between two countries) flights.

ICAO is also working on the design of a global market-based measure (GMBM) to address emissions from international aviation. To support progress being made in the ICAO on its development of a GMBM, the EU introduced a temporary derogation from the application of the EU ETS compliance obligations for flights to and from countries outside the EEA (as well as flights to and from outermost regions). This is a temporary measure that will expire at the end of 2016. Any adjustment to the EU ETS thereafter will depend on progress made on the GMBM at the 2016 ICAO Assembly.

## ICAO Global MBM scheme

ICAO Assemblies take place every 3 years and provide a forum through which the 191 Member States of the ICAO agree on the way forward in the form of Assembly Resolutions. At its last Assembly in 2013, ICAO Member States adopted Assembly Resolution A38-18. This Resolution decided that a GMBM to address international aviation emissions had to be developed for decision by the 39 Session of the Assembly, and requested the ICAO Council to finalise the work on it for its implementation from 2020.

It is widely recognised, including by ICAO, that despite progress achieved on aircraft technologies and operational improvements (the so called "basket of measures"), these alone may not deliver sufficient CO emission reductions to achieve a meaningful mitigation outcome nor to meet the agreed target of keeping net CO emissions from international aviation from 2020 at the same level (carbon neutral growth from 2020). For that reason there exists broad agreement on the necessity and desirability of market-based measures in order to achieve those goals. The aviation industry supports the role of market-based measures and the adoption of a single global MBM.

Following the agreement at the 38 Assembly, substantial work has been undertaken within ICAO through the so-called Environmental Advisory Group in order to assess and discuss the main design options for the GMBM on the basis of an offsetting scheme; in parallel, the ICAO's Committee on Aviation Environmental Protection has developed recommendations containing the essential technical rules needed for the implementation of the GMBM, namely as regards monitoring, reporting and verification of emissions and criteria for the eligibility of emission units.

In September 2016, ICAO Member States will convene for the 39 ICAO Assembly in Montreal. The EU expects this session of the Assembly to adopt the key design elements of a GMBM that allows the ICAO goal of stabilising net CO emissions from international aviation at 2020 levels to be met and to

establish a clear roadmap for an effective implementation from 2020.

## ETS review

The experience in the EU with the ETS shows that market-based measures can be effectively designed and implemented to address aviation emissions. Under the EU ETS, companies from European and third countries are annually monitoring and reporting CO emissions from their intra-European activity and surrendering the corresponding allowances to comply with the system. Compliance rates are currently above 99.6% of emissions covered by the ETS, and its mitigation impact under the current scope is estimated at 16 million CO tonnes per year.

The scope of the EU ETS in the period after 2016 is linked to the development and adoption of a GMBM by ICAO. According to Article 28a of the ETS Directive the Commission shall inform the European Parliament and the Council of the progress made in the ICAO negotiations. In particular, the Article states that, "following the 2016 ICAO Assembly, the Commission shall report to the European Parliament and to the Council on actions to implement an international agreement on a global market-based measure from 2020, that will reduce greenhouse gas emissions from aviation in a non-discriminatory manner". As this provision also states, in its report, the Commission shall "consider, and, if appropriate, include proposals in reaction to, those developments on the appropriate scope for coverage of emissions from activity to and from aerodromes located in countries outside the EEA from 1 January 2017 onwards".

It is important to recall that in the absence of an amendment being adopted by the European Parliament and the Council, the EU ETS reverts to its original scope once the temporary derogation established by Article 28a of the Directive ceases to apply (end of 2016).

# Questions for consultation

Following the Paris Agreement and considering the agreed long-term goal, what kind of effort should come from international aviation and how should this develop over time?

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International Air Transport Association (IATA) has adopted targets to mitigate CO2 emissions from air transport on carbon neutral growth by 2020 and reducing emissions by 50 % by 2050 compared to 2005 emissions. These targets are welcomed by Denmark and are considered as an important step in assuring that international aviation contributes to the objective of "holding the increase in the global average temperature to well below 2 °C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5 °C above pre-industrial levels" as set out in the Paris Agreement adopted by Conference of the Parties of the United Nations Framework Convention on Climate Change at COP21 in December 2015. Over time all sectors should be regulated to be in line with the 2/1.5 degree objective in the Paris Agreement.

Due to space limitations, please refer to the last section ("any other comments") for the second half of the Danish response to this question.

Which elements should emerge from the 2016 ICAO Assembly to provide for the implementation of a robust GMBM by 2020?

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The ICAO Assembly should deliver an agreed resolution with specific timelines for implementation of a GMBM. The agreed GMBM scheme should be environmentally effective allowing for the use of high quality emission units and not introduce competitive distortion. It should also not constitute an excessive administrative burden upon operators.

In what ways could action being taken by countries and groups of countries to achieve their respective climate goals, notably by addressing emissions from domestic aviation, complement and interact with a GMBM addressing emissions from international aviation?

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The possibility of extending the GMBM to domestic flights on a voluntary basis for each country could reduce the reporting obligations compared to having different schemes for international and domestic aviation.

Which should be the main principles and criteria guiding a review of the EU ETS following the 2016 ICAO Assembly?

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A clear timeline for the implementation of a GMBM should be set as well as targets consistent with the 2/1½ degree objective in the Paris Agreement. The assessment of the EU ETS should – in light of the outcome of negotiations in ICAO - include a review of the pros and cons of the continuation of the EU ETS, including competitive distortion between operators, environmental benefits, legal consequences and political consequences.

Which options should be considered for the EU ETS for the period 2017-2020?

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In light of the elements contained in a potential agreement by ICAOs General Assembly in September 2016 the European Commission should report to the European Parliament and Council and propose measures as appropriate to take international developments into account with effect from 2017. Potential measures depend on the outcome of the ICAO Assembly. The options to be considered should include a continuation of the present "Stop The Clock"-scheme, if the ICAO process produce fruitful results.

Which options should be considered beyond 2020?

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Potential EU measures beyond 2020 depend on the outcome of the September 2016 ICAO Assembly and whether a GMBM will be in operation beyond 2020. The long term solution should be one global solution, preferably a GMBM.

According to Regulation 421/2014, the Commission proposal following the 2016 ICAO Assembly should "swiftly propose measures in order to ensure that the international developments can be taken into account", and "give particular consideration to the environmental effectiveness of the EU ETS (...), including better alignment of the rules applicable to aviation and stationary installations respectively". Which elements of EU ETS could be considered in order to take into account international developments as well as to improve its environmental effectiveness (e.g. review of auctioning shares, use of international offsets – including from the new mechanism established by the Paris Agreement, etc.)?

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The Commission's November 2015 Carbon Market report documents that a huge surplus of emission allowances for stationary installations has accumulated in the ETS due to over-allocation and furthered by extensive use of external credits from projects carried out under the flexible mechanisms of the Kyoto Protocol. There is therefore a need to strengthen the ETS through further structural reforms.

Should small non-commercial aircraft operators (emitting less than 1000 tonnes of CO2 per year) continue to be exempted from the EU legislation from 2021 onwards? If so, what alternative measures, if any, should be considered?

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Small non-commercial aircraft operators (emitting less than 1000 tonnes of CO2 per year) should continue to be exempted due to the disproportional high administrative costs of inclusion. In considering any alternative measures, it should be ensured that the potential effects are proportional to the administrative costs of aircraft operators and national authorities.

Submit any other comments you may have.

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This is a continuation of the Danish response to the first question ("[...] what kind of effort should come from international aviation and how should this develop over time?"):

Denmark finds that a solution with one global market based measure best secures both an effective environmental outcome as well as minimizes the risk of market distortions. The March 2016 ICAO Draft Assembly GMBM-proposal (Global Market Based Measure) of the President of ICAO suggests carbon neutral growth by 2020 and applies until the end of 2035. The suggestion is that international aviation should offset emission growth beyond the 2020 emission level through buying emission reduction credits. The suggested GMBM is due for an extensive review by 2032, and furthermore the proposal includes a review every 3 years. The present proposal is, in Denmark's view, largely in line with the targets proposed by IATA. Denmark would also emphasize the need for developing and using new advanced aircraft technologies and suggests that attention should be paid to the use of 2<sup>nd</sup> generation biofuels in aircraft.