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COMISSÃO LATINO-AMERICANA DE AVIAÇÃO CIVIL

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LATIN AMERICAN CIVIL AVIATION COMMISSION

COMISIÓN LATINOAMERICANA DE AVIACIÓN CIVIL

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TRIGÉSIMA TERCERA REUNIÓN DEL GRUPO DE ESPECIALISTAS EN ASUNTOS POLÍTICOS, ECONÓMICOS Y JURÍDICOS DEL TRANSPORTE AÉREO (GEPEJTA/33)

(Lima, Perú, 2 al 4 de julio de 2014)

Cuestión 4 del Orden del Día: Medio Ambiente

Cuestión 4.5 del Orden del Día: Estado de situación del debate en el Grupos Asesor sobre Ambiente del Consejo de la OACI (EAG, por sus siglas en inglés), respecto de la cuestión de las MBM. Comentarios formulados por la Representación Argentina ante el Consejo de la OACI.

(Nota de estudio presentada por la República Argentina)

Antecedentes

1 la última Asamblea de la OACI, se adoptó la Resolución A38-18, mediante la cual se pide al Consejo de la Organización que elabore un plan mundial de MBM para la aviación civil internacional, que será considerado por la próxima Asamblea de la OACI (2016). No obstante, dicha Resolución reconoce al principio de las responsabilidades comunes pero diferenciadas (CBDR) entre los principios para la elaboración de las MBM, rechaza la aplicación de medidas unilaterales, y también pide al Consejo que finalice los estudios sobre la viabilidad y factibilidad de dicho plan mundial, teniendo en cuenta las necesidades del desarrollo de la aviación civil internacional, así como las negociaciones dentro de la CMNUCC.

2 Para auxiliar al Consejo en esta labor, se creó un grupo político ("Environment Advisory Group", EAG) que se encargará de supervisar todo lo relacionado con la aplicación de la Resolución A38-18, y reportará sus trabajos a cada sesión del Consejo; y un grupo técnico ("Global Market Task Force", GMTF, en el marco del Comité para la Aviación y la Protección del Medio Ambiente, CAEP) que apoyará los trabajos del EAG y del Consejo. El EAG está integrado por 17 Estados miembros del Consejo (Argentina, Brasil, Canadá, China, Egipto, Emiratos Árabes Unidos, España, Estados Unidos, Federación Rusa, India, Italia, Japón, México, Reino Unido, Singapur, Sudáfrica y Tanzania), y por la IATA en carácter de observador. Por su parte, en la GMTF, también participan la Argentina y Brasil, en su carácter de mimbros del CAEP.

Propuesta de la Secretaría del EAG para la elaboración de una MBM global.

3 Dentro del EAG, se ha venido debatiendo sobre un borrador efectuado por la Secretaría, al que se denomina "Strawman", cuya última versión se anexa a la presente Nota de Estudios (Anexo I), con el objeto de contribuir a dar más transparencia a los debates del EAG.

4 Se formulan a continuación los puntos de vista generales de la Delegación Argentina sobre el "Strawman":

a. El documento propone la adopción de un mecanismo obligatorio de compensación de emisiones de CO2, con el objetivo de alcanzar la meta global de crecimiento neutro de carbono desde el año 2020. No obstante, debe tenerse presente que esa meta no refleja el consenso de los Estados miembro de la OACI, dado que ha sido reservada por numerosos países. En efecto, la meta ha sido establecida por el párrafo 7 de la Resolución A-38-18, que fue reservado por Arabia Saudita, Argentina, Australia, Bahrein, Brasil, China, Cuba, India, Federación de Rusia, Lituania (en nombre de los 28 Estados miembros de la UE, y otros 14 Estados miembros de la Conferencia Europea de aviación civil), y Venezuela. En el caso de los Estados alineados con la posición de los países en desarrollo, esta reserva se ha debido a que la meta global no resulta consecuente con el CBDR. Por el contrario, para los Estados alineados con los países desarrollados, la reserva a este párrafo se funda en que han buscado una meta más ambiciosa y una redacción de mayor compromiso con su cumplimiento.

b. Además, el mecanismo propuesto consistiría en el establecimiento de un sistema global de comercio de derechos de emisiones de CO2 de estilo similar al establecido por la Directiva Europea 2008/101/CE, que ha sido objetado por la Argentina.

c. El texto hace caso omiso a la inclusión del principio de Responsabilidades Comunes pero Diferenciadas (CBDR) en el diseño de la MBM propuesta, reemplazando este principio por la eximición de compromisos para los países con muy bajas emisiones, lo que no resulta una adecuada recepción del CBDR, que protege a todos los países en desarrollo, independientemente de su nivel actual de emisiones.

d. Como se advierte, el proyecto está muy alejado de la posición Argentina y muchos otros países en desarrollo sobre Emisiones de CO2, por lo que sería deseable poner de manifiesto la necesidad de que el esquema propuesto se aliñe con los principios de la CMMUCC. A estos fines, se debe tener presente que la Resolución A38-18, que pide al Consejo que elabore un plan mundial de MBM, ha reconocido que deberá tenerse en cuenta el CBDR en la elaboración y aplicación de estas medidas, conforme al punto p) del Anexo sobre MBM de esta Resolución.

Comentarios presentados por la Representación Argentina ante el Consejo de la OACI sobre el "Strawman", durante el Consejo 202°.

5 A continuación, se adjunta a la presente Nota de Estudios el documento presentado por la Representación Argentina (ANEXOII), al efecto de que los países de la Región puedan conocer sus contenidos.

Medida Propuesta

6 Se invita al Grupo de expertos a tomar nota de la información presentada, intercambiar criterios, y considerar los argumentos expuestos para preparar una posición regional sobre el tema, para ser debatida en el 86° Comité Ejecutivo de la CLAC (Brasil, agosto), dado que esa Reunión será previa a la reanudación de los debates del EAG en la OACI (septiembre).

V1.1 – 12 May 2014

STRAWMAN FOR A GLOBAL MARKET-BASED MEASURE SCHEME FOR INTERNATIONAL AVIATION

1. DESCRIPTION

1.1 In this Strawman, a mandatory offsetting approach to attain carbon neutral growth from 2020 is used as the basis for the global market-based measure (MBM) scheme for international aviation. Offsetting is accomplished through the purchase of emissions units that certify emission reductions in other locations or sectors. The global MBM scheme uses emissions units available through carbon markets. This global scheme does not generate any emission reduction credits.

1.2 Each year after 2020, operators offset a portion of their emissions corresponding to any increase in global CO_2 emissions from 2020. The quantity to be offset by each operators is calculated using a formula that takes into account the average percentage increase in the sector's emissions, operator's individual percentage increase in emissions, and adjustments for fast growers and early movers. The emissions for all routes serving States that account for a small proportion of global emissions are exempted. The global scheme is regulated and enforced by States in line with international standards developed by ICAO.

2. GOAL OF THE GLOBAL MBM SCHEME

a) The goal is carbon neutral growth from 2020.

b) The baseline for determining quantities to be offset is computed first by using an average of three-year of emissions from 2018 to 2020 in order to account for any exceptional variation that may occur for individual operators in a specific year.

c) This average will be taken as the reference.

d) The difference between the reference and the actual global emissions in 2020, or 3% of the actual global emissions in 2020, whichever is the highest, will be used as a reserve to cope with exceptional cases, i.e. fast growth and early movers.

   If 3% is used, then the reference emissions for each operator will be adjusted proportionally.

e) If the emissions of an operator are not reported, then the reference amount is (TBD).

3. SCOPE OF THE GLOBAL MBM SCHEME

a) All international flights, i.e. flights departing from an airport of a State and arriving at an airport of another State, are included into the scope of the global MBM scheme unless exempted or not within the scope of ICAO regulations.

b) Each flight is attributed to an operator identified through the Air Operator Certificate (AOC) issued by its State . Flights not operated under an AOC will be attributed to

the owner of the aircraft unless he can demonstrate that another entity was the operator.

c) Emissions are offset for CO_2 only and accounted for in metric tonnes of CO_2; no other greenhouse gas emissions are addressed.

d) The emissions to be offset are for the entire flight.

4. QUANTITIES OF OFFSET FOR EACH OPERATOR

4.1 General

a) Operators are responsible for purchasing their required quantity of offsets.

b) The emissions to be offset are distributed amongst operators using first a basic calculation then “adjustment” calculations for fast growers and early movers.

c) If this calculation leads to a negative value, then the operator has no offset to purchase nor receives credit.

d) The emissions of exempted flights are removed from the calculation of the emissions offsetting obligation in the reference year (average of 2018 to 2020) and the current year.

e) Calculation is based on operators’ reporting as verified.

f) Alternative fuels are accounted as generating [to be proposed by CAEP Alternative Fuels task Force] emissions.

4.2 Basic Calculation

a) The basic calculation uses a combination of two rates. The “individual relative rate” is an operator’s individual percentage of increase of its own emissions over the reference year relative to its emissions in the current year. The “sectoral relative rate” is the percentage of global quantity of emissions to offset in the sector relative to the global emissions of the current year.

b) An operator’s obligation for the current year is composed of two parts: a collective part and an individual part. The collective part is the product of its own emission by the sectoral relative rate. The individual part is the product of its own emission by the individual relative rate, which equals to the variation in its own emissions over the reference year. These two parts are taken in equal proportion, 50% each.

4.3 Eligible Adjustments for Fast Growers and Early Movers

a) The reserve, as defined in paragraph 2 d) above, is allocated each year for the reduction of obligations for fast growers and early movers in proportion of their eligible amounts.

b) Fast growers are operators whose individual emissions grow more than twice the global average growth rate. The eligible amount for such a fast grower is determined by its “total emissions in the reference year” x “individual growth rate – twice the global growth rate”.

c) Early movers are operators whose individual fuel efficiency is more than 10% above the global fuel efficiency in the reference year. Efficiency is computed as the ratio of traffic (RTKs) over emissions.

d) The eligible amount for an early mover is determined by the difference between the emissions they would have had at 10% above the global fuel efficiency and their actual emissons in the reference year.

e) The eligible amount for early movers is applied only for the first 5 years from 2021 to 2025.

4.4 **Corrections of Adjustments for Fast Growers and Early Movers**

a) If the total eligible amount for all fast growers and early movers is equal or less than the attributed reserve, they receive the eligible amount, which is reduced from the obligations as per the basic calculation above.

b) If the total eligible amount for all fast growers and early movers is more than the attributed reserve, the eligible amount to be received by them is downsized proportionally (by the multiplication factor of the attributed reserve over the total eligible amount).

4.5 **Adjustments for New Entrants**

a) New entrants in the market will be exempted for 5 years or until the year in which their annual emissions exceed x% of global emissions in the reference year, whichever occurs earlier. After this year, they are included in the scheme and treated in the same way as the other operators using their average emissions in previous two years as their reference emissions.

b) A new entrant is defined as any aircraft operator that commences operation of an activity falling within the scope of the scheme on or after its entry into force and whose activity is not in whole or in part a continuation of an aviation activity previously performed by another aircraft operator.

4.6 **Exemptions for Services to Lowest Emissions States**

a) States are listed in increasing order from the lowest to the highest amount of emissions generated by all international flights to and from individual States.

b) Flights to and from the States in this list are exempted from the top State down to the State where the cumulative amount of emissions reaches y% of global emissions in the reference year.

c) This list is established in the first year of application, and revised after 5 years.

d) The exempted emissions are not included in the reference year and in the current year.

4.7 Technical Exemptions

a) Aircraft operators emitting less than 10,000 metric tonnes of CO_2 per year are exempted under the scheme in order to take into account the administrative burden on very small operators.

b) Aircraft with less than 5700 kg Maximum Take Off Mass (MTOM) are exempted.

c) Humanitarian, medical and firefighting operators are exempted.

d) The exempted emissions are not included in the reference year and in the current year.

5. EMISSIONS ACCOUNTING SYSTEM (REGISTRY) AND THE QUALITY CRITERIA OF EMISSIONS UNITS

5.1 Development of International Aviation Registry and Linkages

a) An on-line international aviation CO_2 emission registry accounts for annual emissions by operators under the scheme. The registry also tracks operator's emissions offsetting information.

b) Where necessary, system linkages to the International Transaction Log (ITL), domestic offset schemes, voluntary schemes, etc. are established to facilitate transactions.

5.2 Eligible Emission Units

a) International aviation relies on the global market supply of emission units..

b) An offset credit is a bankable and tradable compliance instrument, which represents a reduction or removal of one metric tonne of carbon dioxide equivalent, and must meet the eligibility criteria for international aviation (To be proposed by CAEP GMTF).

c) In addition to offset credits, operators can meet obligations by purchasing carbon allowances from legally mandated emission trading programs, provided that these allowances comply with the eligibility criteria for international aviation (To be proposed by CAEP GMTF).

6. MONITORING, REPORTING & VERIFICATION (MRV)

a) Details of the MRV process and the corresponding standards are to be developed by CAEP GMTF.

b) Operators reports data on emissions between 2018 and 2020 to establish the reference year.

c) Monitoring and reporting of emissions by operators is based on actual fuels consumed, with a distinction between conventional and alternative fuels.

d) Each year, aircraft operators report their emissions for each route to a single State authority (the authority who issued the AOC).

e) Small operators [TBD] are allowed to use a simplified reporting format (to be proposed by CAEP GMTF).

f) States compile and transmit emissions information of their operators to ICAO each year (date to be determined). ICAO calculates the total emissions by the sector each year based on submissions.

g) ICAO collects and stores compliance data reported by States and verifies that the global goal is met.

7. ENFORCEMENT AND LEGAL INSTRUMENTS

a) States are responsible for enforcement of the compliance of operators with the global scheme in line with ICAO standards.

b) ICAO enforcement standards are the following: (TBD).

8. COMPLIANCE CYCLE

a) The compliance cycle, within which operators must reconcile their obligations under the scheme, is every 3 years. Operators will be provided a 6 month “window” to demonstrate compliance to States (that is, the deadline for compliance is 6 months after the obligation under the scheme).

9. DURATION OF SCHEME

a) The scheme will cease to apply if the global emissions are going below the level of 2020.

b) The design elements of the scheme will apply until the end of 2035. A review of the design elements will be made prior to any extension of the scheme beyond 2035. A review will be undertaken by the end of 2033.

— END —

COMMENTS SUBMITTED BY ARGENTINA ON STRAWMAN v 1.1 (June 19, 2014)

The Delegation of Argentina is thankful for the opportunity to submit comments on version 1.1 of the Strawman. In the same vein, Argentina wish to thank the Secretariat and the Chairman of the EAG for the work undertaken so far, and kindly request that the views expressed in this paper be considered on the occasion of elaboration of a new version of the Strawman.

It is the view of Argentina that the current version of the Strawman presents a number of shortcomings, listed as follows.

- The idea of common but differentiated responsibilities (CBDR) as a guiding principle (Res A 38-18) is not incorporated in the Strawman.
- The proposal introduces an element of distortion in the incentive that highly emitting operators may naturally have to reduce emissions.
- It also wipes off any historical responsibility of developed countries for past emissions.
- It generates a perverse incentive to generate more emissions during the reference period.
- As a consequence of what was expressed in the precedent point, the emitters are given the opportunity to clearly exert influence on the amount of emissions to be offset.
- The proposal also favors current offerors of permits.
- It does not provide incentives for reduction of emissions with respect to the base period.
- Hence, the proposal does not encourage an efficient behavior on the part of the aircraft operators.

It is noted that all these ideas are further developed in the Annex hereto attached.

The Delegation of Argentina remains fully committed to working along with the members of the EAG to facilitate positive outcomes of this process.

Comments submitted by Argentina on the document "STRAWMAN FOR A GLOBAL MARKET-BASED MEASURE SCHEME FOR INTERNATIONAL AVIATION" Version 1.1 (Appendix A to Document C-WP/14153).

1. Document Strawman 1.1 is based on the premise that **a market-based mechanism (MBM) will be used** to control greenhouse gas (GHG) emissions from international civil aviation. In other words, it rules out the use of other economic or regulatory mechanisms. In addition, taking into account the MBMs analyzed in previous ICAO documents, the Strawman assumes that approval has been given to move on with the study of one of the four mechanisms proposed before.

2. The MBM proposed in Document Strawman 1.1 would mean, in practice, **applying a worldwide emissions trading system mandatory for all countries, even for those that are not listed in Annex I** to the United Nations Framework Convention on Climate Change (FCCC) – *i.e.*, countries without emissions reduction commitments. Therefore, the principle of **common but differentiated responsibilities** (CBDR) would not be observed, because all countries will have to take responsibility for the emissions they generate, regardless of whether they are Annex I countries or not.

In this regard, the exceptions that appear in the document only refer to fast growers, early movers, new entrants, and flights that have as their origin and destination lowest emissions states.

3. As the number of permits to be presented is linked to the variation of emissions relative to the reference period and not to the total emissions generated, the contribution of all countries is evened out for dealing with the problem of GHG emissions, leaving aside differences in each country's contribution to historical and present emissions. That is, the emission of a ton by a country that emits 10 tons is the same as that of a country that emits 1,000 tons of carbon dioxide (CO_2).

In other words, **it does not look at absolute emissions of the aviation sector but only at relative variations** (emissions above or below the base period).

According to Strawman 4.2.a) and b), the obligation to purchase quantities of offset would be governed by the following formula:

$$(T_i . E_i) . 0{,}5 + (S_i . E_i) . 0{,}5 = C_i$$

where Ti represents the individual rate, Ei is the amount of carbon absolute emissions of the State, Si is the sectorial rate, and Ci equals the number of quantities to be offset.

Argentina's concern about this Strawman proposal can be better explained by presenting a concrete example that includes different hypothetical scenarios.

In this example, the emissions to determine the individual rate are those of the current year not of the reference period, being the latter used to determine the sectorial rate, as shown in the Excel chart attached to the Strawman proposal (this specific point is further analysed in paragraph 9 of this paper).

The Annex attached to this document depicts a scenario in which only two operators are considered: the operator of a developing State (DES) with a small number of absolute flights, and the operator of a developed State (DS), amounting to a great number of absolute flights, as explained below.

The Annex presents an initial basic scenario in which for the average base period carbon emissions of operators of DES and DS are 5 and 200 units respectively. The number of increase of their emissions is 5 units for each, and a relative sectorial base rate of 1% is assumed.

The responsibility for total carbon emissions of the current year is allocated 5% for DES, and 95% for DS. However, if the Strawman analysis is applied -paragraph 4.2. a) and b)- the responsibility for compensations via the purchase of emission permits will be allocated 59% for DES, and 41% for DS.

In a next step, some variations of the basic scenario are developed in the chart, as follows.

The hypothesis # 1 presents a scenario in which the absolute variation of emissions of the DES operator is less than that of the basic scenario.

The hypothesis # 2 depicts a case resulting in an increase of emissions of the DES operator in relation with the basic scenario.

Finally, the hypothesis # 3 presents the case where there is no increase of the emissions of the DS operator in the based period.

In all these hypotheses these notorious differences between the distribution of the responsibility for total emissions and the distribution of the responsibilities for the offset constitute a clear evidence that the scheme proposed by the Strawman is prejudicial for those operators producing the less total emissions.

This, in turn, **distorts the incentives to reduce GHG emissions among highest emissions operators.** As the responsibility is higher in the case of operator DS, there should be greater incentives for DS to reduce its emissions.

4. A goal like that proposed in the Strawman document –carbon-neutral growth from 2020 (item 2. a) –entails, in practice, starting to measure emissions from 2018-2020, **clearly "erasing" the historical emissions of developed countries.**

In addition, **by taking a future period as the reference period, it provides perverse incentives to generate more emissions in those years** so that the percentage variations in the successive years are lower than those occurring in the base period.

Thus, **the emitter is given the opportunity to clearly exert influence on the emissions to be offset** and, therefore, on the number of permits it will have to acquire. If the emitter emits more than what is usual in the period to be taken as reference, it is likely that the emissions in subsequent years will be lower, and thus the operator will not have to offset emissions, because the variation of emissions will be negative relative to the reference period. That is why any kind of economic instrument intended to make the emitter emit less than in a given year requires that the emitter does not exert influence on the level of emissions in the base period.[1]

5. The Strawman proposal is based on the provision of emission units coming from the world market of permits (item 5.2.a), **favouring current offerors of permits,** since at present time, just one market accounts for around 70% of the permits and equivalent instruments traded on the world's carbon markets.[2]

Thus, a mechanism such as that proposed in the Strawman document creates additional demand basically for that market. A higher demand for permits would push up the price, which would contribute to solving the current problem of the mechanism in force in that market (the low price resulting from lacking demand, a low price that does not create an adequate incentive to reduce GHG emissions, as indicated in the ICAP presentation).

6. **The proposed mechanism imposes penalties** for failing to meet the CO_2-neutral growth goal, **but does not provide incentives** for reducing emissions relative to the base period (item 4.1.c).

7. In addition to the complexity of the calculation proposed (items 4.2 a and b), **the mechanism does not encourage efficient behaviour on the part of aircraft operators**. This is due to the fact that for the estimation of the obligations of aircraft operators, both individual (how efficient or not an operator is in reducing its emissions relative to the base period) and collective behaviour – over which a single operator has no control – are taken into account. That is, even where the behaviour of an operator has been efficient and such operator does not need to offset emissions, if the sector has generated excess emissions relative to the reference period, the aircraft operator will be penalized by having to compensate for the collective behaviour.

In other words, **the form of estimation of emissions favours those who emit above the average** of all operators, *i.e.*, those who most contribute to GHG emissions. This happens because those who emit above the average must acquire fewer permits than the individual

[1] This is common practice in negotiations on agricultural subsidy reductions in the World Trade Organization, which are aimed at the country granting the subsidies not deciding on the level of subsidies on which reduction estimations are made so that it does not have an influence on the amount to be reduced.

[2] There are mandatory emissions trading systems at present, such as in the European Union, Australia, New Zealand, Switzerland and some regional schemes in the US (Regional Greenhouse Gas Initiative - RGGI), Canada (in Quebec and Alberta) and Japan (in the regions of Tokyo and Saitama); as well as voluntary ones, which tend to impose less strict conditions on participants, including that of Chicago in the US, but which stopped operating in late 2010. To date, the existing schemes are not directly related to one another, *i.e.*, the permits traded under a given scheme are not admitted in another scheme. However, the EU and Australian schemes are expected to become interrelated in the mid-term: in 2015, it will be possible to use the EU permits in the Australian system; and in 2018, the permits of the Australian system will be usable in the EU scheme. Some systems allow negotiating credits originating in the Kyoto Protocol mechanisms, such as the European, Swiss and New Zealand systems. In 2012 emissions trading in the European market registered transactions in excess of 10 billion tons of carbon dioxide equivalents (tCO_2e).

variation of their emissions, whereas the operator who emits less than the average must purchase permits in an amount higher than the individual variations of its emissions. Therefore, this form of estimation reduces the incentive that this kind of instruments brings for emitters to reduce their emissions. Instead, it is an incentive for everyone to seek that the variation of their emissions be similar to the sector's average variation.

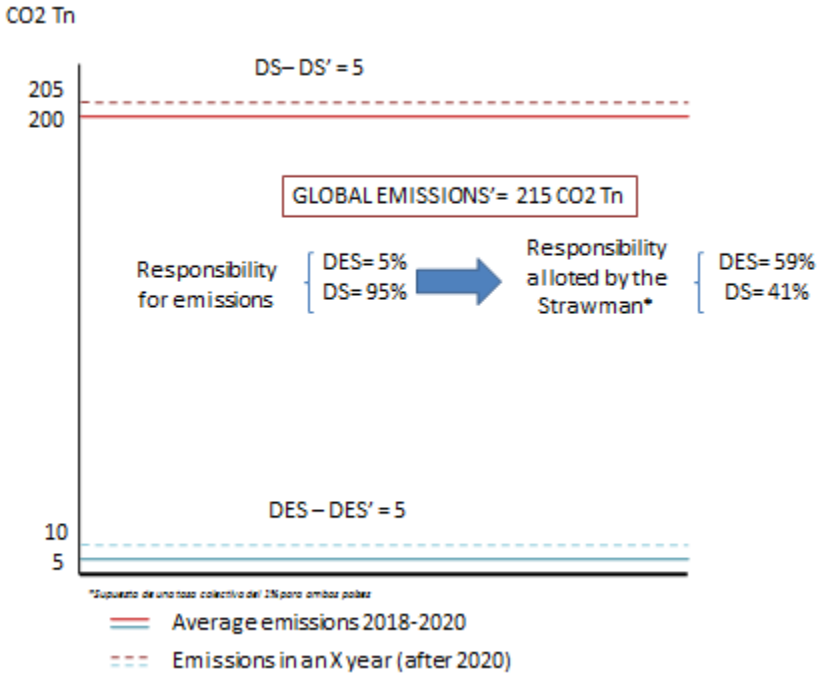
This situation is found particularly in the adjustments proposed for fast growers, where most of the benefits go to those who emit most, since aircraft operators falling within this category would not have to offset their higher emissions in whole, but rather in part, because the Strawman's proposal includes a reserve fund for such purpose (items 2. d and 4.3 a and b).

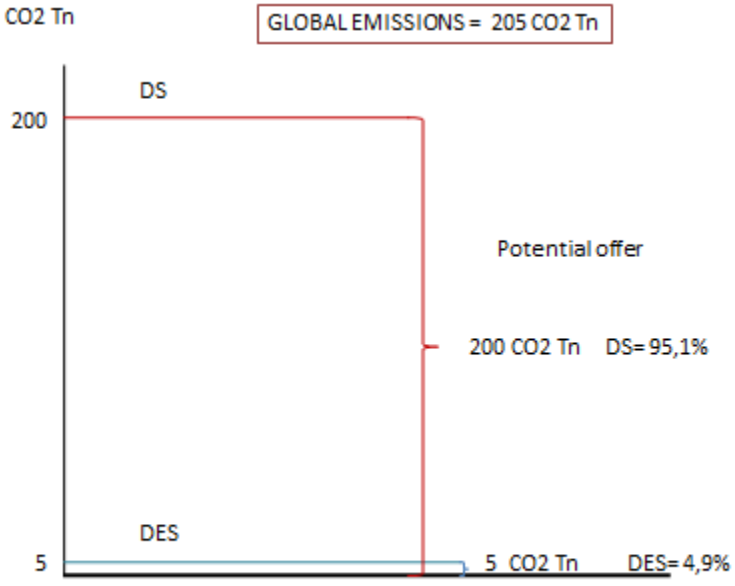
8. When estimating the number of permits to be acquired on the basis of emission variations relative to the reference period, **those able to be equipped in the future with technologies that allow them to have a low or even negative variation in emissions are benefited**. It is not clear whether all aircraft operators are on an equal footing to acquire this kind of technologies.

9. In the calculation formula (4.2.b), **it is not clear whether the expression *own emission*** used to calculate the number of emissions to be offset is that for the reference period or for the current year. If it refers to the reference period, it is offset by the variation of emissions relative to such period; if it refers to the current year, it is offset by a value above the variation of emissions relative to the reference period. Example: if the reference emission is 100 and the emission for the current year is 105, the variation equals 5 units and the variation rate is 5%. If the variation rate is applied out of 100, the number of emissions to be offset is 5; if the variation rate is applied out of 105, the number of emissions to be offset is 5.25.

In the Strawman Excel chart, the individual rate is calculated with respect to the reference year level, while the calculation of the collective part is based on the current year. This is *prima facie* an inconsistency that demands further clarification.

Graphic 1. Scenario 1 DEMAND: Aviation Sector





Country	average emission (2018-2020)	current year emission	absolute variation	individual rate variation	sectorial rate variation	amount to be offset (par. 4.2)	share on the total emission for the curent year	share on the amount to be offset
DS	200	205	5	3%	1%	3.6	**95%**	**41%**
DES	5	10	5	100%	1%	5.0	**5%**	**59%**
Total	205	215	10			8.6	100%	100%
DS	200	205	5	3%	1%	3.6	**96%**	**50%**
DES	5	9	4	80%	1%	3.6	**4%**	**50%**
Total	205	214	9			7.2	100%	100%
DS	200	205	5	3%	1%	3.6	**95%**	**35%**
DES	5	11	6	120%	1%	6.6	**5%**	**65%**
Total	205	216	11			10.2	100%	100%
DS	200	200	0	0%	1%	1.0	**95%**	**17%**
DES	5	10	5	100%	1%	5.0	**5%**	**83%**
Total	205	210	5			6.0	100%	100%