

Bridging the political barriers in negotiating a global Market Based Measure for controlling international aviation emissions

Background

Developing countries have continuously argued against a global MBM that would treat all carriers/states equally on the basis of the provisions and principles of the UNFCCC, most notably the principle of CBDR&RC. For developing countries it is about a fair and equitable deal that balances climate stabilization with sustainable growth and development.

Some developed countries have continuously advanced arguments related to competitive distortions as the imperative for a global MBM. They too frame this as a precondition for a fair and equitable deal.

Both developed and developing countries also fear that a sectoral agreement for transnational aviation could raise expectations regarding the balance of developed and developing country commitments under the UNFCCC. Therefore, in both UN specialized organizations for international transport, ICAO and the International Maritime Organisation (IMO), there is a fundamental collision between the principles of CBDR&RC and equal treatment.

ICAO has always stressed that its global goals are sector-wide and do not imply any specific obligations for individual states. Furthermore, it has sought to reframe the language to decouple it from the UNFCCC, referring instead to the Special Circumstances and Respective Capabilities of Developing Countries (SCRCDC). Others try to address CBDR&RC concerns by referring to no net incidence (NNI) of any revenue-raising measure on developing countries. These are all attempts to offer an enhanced interpretation of CBDR&RC that differ from historically polarised discussions within UNFCCC. Likewise, the 2010 ICAO Resolution also introduced a *de minimis* threshold for contributing to climate action. Under the *de minimis* approach, states with less than 1% of traffic (measured using Revenue Ton Kilometers, RTKs) do not have to submit action plans showing how they will contribute to the ICAO goals, while “commercial aircraft operators of States below the threshold should qualify for exemption for application of MBMs that are established on national, regional and global levels”. Many states issued reservations against this clause questioning both the level of the threshold and the implications: only 26 States are above the threshold, exempting many developed countries while including some developing countries. A carrier-based exemption, it is often claimed, also has the potential to create competitive distortions where carriers from *de minimis* states compete directly on a given route with non-exempt carriers. As a consequence, the ICAO expert group on an MBM and large parts of the ICAO council no longer support this exemption.

At a multi-stakeholder workshop organized by WWF in October 2012, there was interest in exploring ideas addressing issues of equity and the application of CBDR&RC in the context of a global MBM under ICAO. A CBDR&RC Working Group was created and, over the course of several months and numerous conference calls and email exchanges, the following options

were identified as deserving further exploration and elaboration. These are not consensus positions, but illustrative options worthwhile to be elaborated as ‘straw person’ proposals. The full set of options considered by the ICAO are presented in an Annex.

“Straw Person Proposals for an Enhanced Interpretation of CBDR&RC

There are two broad indicative approaches: differential treatment of routes and channeling of revenues.

A) Differential obligations by route

Criteria could be established to differentiate between routes, e.g., routes with low levels of activity or emissions that may be particularly vulnerable to increased costs associated with mitigation measures. This could be achieved using metrics that reflect characteristics of (i) the departing state (for example, the development status measured in GDP or other economic activity criteria, or even in political terms such as LDC or non-Annex-1 – NAI - as per UNFCCC) or (ii) the aviation-specific characteristics of the route. Under the first approach, all routes departing from a state that qualifies for a specific type of differential treatment would be subject to the same rule. Under the second approach, strong competitive routes would be included but differentiation would not apply across the board by state, so different routes from a given country could be subject to different treatment (including potentially by exemption).

The two options of differentiation are described in more detail below:

1. Route-based differentiation based on national indicators:

Under this approach, states would be allocated to one of three categories defined by economic and/or other development criteria (e.g. GDP per capita). For example: the threshold for Tier 3 could be set at a level that included all LDCs; Tier 2 could be broadly representative of other NAI developing countries, with all remaining states being allocated to Tier 1. At the basis of this approach are new categories, or graduation that breaks with the strict AI/NAI distinction in climate negotiations. It should be noted that a binary division as a matter of the legal form of an agreement is distinct from differentiating the commitments and actions contained within such an agreement. That is, an agreement might retain the legal form of categories of developed and developing countries, but apply a range of commitments. Another element of flexibility is timing. This approach to differentiation can be used to phase-in obligations, or to differentiate between them:

2. Route-based differentiation based on aviation characteristics of the route:

Under this option, portions of the pool of allowable emissions would be differentially allocated to routes (e.g., city-pairs or region-pairs) on the basis of growth of aviation traffic on those routes. All routes would be covered from the outset, but flights on fast-growing routes would receive a greater share of the allowance pool than would those on slow-growing routes. This approach would not discriminate among carriers operating on a given route, i.e., those carriers would receive shares of the portion of the allowance pool allocated for that route irrespective of the nationality of the carrier. This approach also would not discriminate on the basis of state. However, since as a practical matter, traffic on routes between fast-growing developing countries and on routes between

fast-growing developing countries and other countries is likely to increase more than traffic on routes between mature markets (principally in industrialized countries), this option provides a tool for addressing the concerns of some developing countries without breaching the Chicago Convention strictures against discrimination on the basis of country or carrier. It should be noted that the criteria of fast-growing traffic on a given route does not address the special circumstances of LDCs or small island developing states (SIDS), so it is unlikely this approach could be a stand-alone solution for differentiation in a global MBM.

Aside from the criteria for differentiation, the key question in designing a global MBM is what will be different between routes. Three options are presented below for how different routes could be given different treatment or obligations, appropriate to the nature of the respective routes or the countries. It should be noted that these are not necessarily mutually exclusive options – they could be combined in different ways.

1. Phase-in.

By way of example, flights between Tier 1 states could be subject to the global measure as soon as it comes into effect. Flights on routes between Tier 3 states will be phased in after 10 years and flights on routes between Tier 2 states will be phased in after 5 years. Routes between tiers will be subject to the rules pertaining to the lowest tier. All carriers operating on a route will be subject to the same rules irrespective of the nationality of the carrier.

2. Differentiated target levels.

By way of example, all routes could be covered from the outset but flights between Tier 1 states would be subject to a cap/baseline equivalent to 2005 levels minus 10%, flights on routes between Tier 2 states will be subject to a cap of no net increase in emissions after 2020, while flights on routes between Tier 3 states will be exempt. Routes between tiers will be subject to the rules pertaining to the lowest tier. All carriers operating on a route will be subject to the same rules irrespective of the nationality of the carrier. The thresholds will be fixed to take account of changes with time, and a periodic review (e.g., every 5 years) will determine whether states need to be reallocated to a different tier.

3. Differentiated compliance obligations relative to a common target level.

Both an offsetting and trading scheme could require the submission of allowances and/or offset credits to meet each entities obligation. Such schemes assume that for each tonne of CO₂ emitted an allowance or project credit equivalent to one tonne of CO₂ must be surrendered. However, to take account of SCRCDC, an emissions factor could be used to either increase or decrease the compliance obligation required. The compliance obligations could be differentiated using the tiered state approach described above. This could be implemented as an interim phase-in arrangement. If it were a permanent feature, the overall cap may have to be adjusted to ensure overall environmental integrity. Those routes representing states with greater capacity and responsibility, and/or more mature aviation markets, could have a greater compliance obligation, while others could have a lesser compliance obligation. So, on some routes, for example, for each tonne emitted, an entity would be required to surrender 0.5:1 or 0.3:1 allowances or project credits per tonne of emissions. Routes representing states with greater capability/responsibility could be

required to surrender allowances at a ratio greater than 1:1. Such a system should be implemented in a manner that maintains the integrity of the emissions cap. Thus: globally, the system must ensure that, on average, each tonne of emissions is matched by at least one tonne of allowances.

B) Channeling of revenues

Under this indicative approach all carriers would participate in the global measure and it would apply to all international routes. There could thus be common treatment at operator level. Differentiation would then occur during the distribution of revenues, for example to ensure no net incidence on developing countries.

Revenue could be generated through an auction under a global trading system or through a transaction levy on project credits in an offsetting scheme. In a WWF report undertaken by Vivid Economics/AET, the amount of revenue that could be generated was estimated at \$3.6 billion per annum in 2030 for offsetting and \$11.7 billion for an ETS with 50% auctioning (using a global carbon credit price of \$25 per tonne of CO₂ in 2020, rising to \$40 in 2030). A third option may be to impose an emissions levy that would cover all emissions (pricing all emissions and addressing the issuing of allowances that have been distributed freely or emissions under the baseline for offsetting in the other two options). Assuming it was levied at the same price, this option could raise \$26.3 billion per annum by 2030.

There is, however, a huge gap between (i) the notion of generating revenues for climate purposes and (ii) overcoming the CBDR&RC issue that lies at the heart of the current impasse in ICAO by ensuring no net incidence on developing countries by differentiating during the distribution of revenues.

Whereas the notion of revenue use and channelling under the heading of innovative climate finance instruments is not new, there has been strong opposition to generation of revenue in ICAO. To the degree that the notion of revenue is tolerated in aviation circles, there is strong resistance to using it for out of sector purposes. In the relevant negotiations the use of revenues has historically also not been very convincing to developing countries including the most vulnerable countries. The response typically centres on the financing obligations of developed countries, and concerns that global measures could shift the obligations to developing countries. Concerns have also been expressed that there may be unintended consequences, such as risks to national economies due to sector-wide applied obligations. Therefore, a combination of revenue-raising with a time limited exemption as in option A above might lead to greater political acceptability.

There are different potential ways to collect, administer and differentially distribute the revenue.

- Revenue collection would ideally be through a central, multilaterally governed entity on the basis of agreed rules (e.g., Green Climate Fund or another entity identified or created by ICAO). It has also been argued that it could be collected by some national governments with clear obligations in terms of the use of the full amount of the funding for climate purposes or to ensure no net incidence on developing countries, but generally we now earmarking at national level is legally complex.
- Part of the revenue would be channelled to a developing countries (e.g., all non-Annex I countries or a sub-group of non-Annex I such as LDCs and/or SIDS, or countries below a

given emissions and/or income threshold) to ensure they are subject to no net incidence.

- The remaining funds can be allocated both to in-sector measures, as well as to out-of-sector climate change mitigation and adaptation actions in developing countries, according to multilaterally agreed criteria and governance procedures.

An alternative to distribution of financial resources directly would be to distribute emissions allowances, with recipients having the right to monetize them. Allowances could be distributed to specific countries – e.g., those in certain political categories such as NAI or those below a certain income and emissions threshold - which would then auction them and generate finance in order to support low carbon development and investment in those countries. Allowances could also be channeled to funds, such as the Green Climate Fund, to generate revenue.

Precedents for UNFCCC Climate negotiations?

One issue that is of concern to many developing countries and developed countries alike, is the potential precedents that an agreement on an MBM for the aviation sector could set for the broader negotiations under the UNFCCC for the post-2020 period. This question is intimately connected to the principle of CBDR&RC, because the primary concern is the perceived potential contradiction between global measures under the ICAO (and IMO for maritime transport) that generally do not differentiate / distinguish between aircraft, airlines and countries, particularly on particular routes, and the recognition under the UNFCCC that distinctions should be made between different countries based on their common but different responsibilities for causing the problem, including historical responsibilities, and respective capabilities in responding to climate change. Developed countries would seemingly want to level the playing field and avoid competitive distortions in global aviation markets; whereas developing countries have long been concerned that these inherently international sectors, following the principles and customary practices of the ICAO and IMO, would not only lead to unfair and inequitable outcomes, but could also set unfavorable precedents for the broader UNFCCC negotiations, including for other sectors where, unlike aviation and maritime transport, emissions take place on national territory and can in principle be adequately addressed by domestic policies.

There are some sound legal reasons why measures to address emissions from the international aviation sector would not serve as legal precedents for other sectors, or an overarching agreement under the UNFCCC. The ICAO is governed by the Chicago Convention, and contains specific provisions to address the unique characteristics of the aviation sector. These do not apply to other sectors. The Convention states that laws and regulations of member states “shall be applied to the aircraft of all contracting States without distinction as to nationality”, and one of the objectives of ICAO, set out in the Convention, is to “Avoid discrimination between contracting States”. At the same time, the Preamble states that the undersigned governments have agreed on certain principles and arrangements in order that international civil aviation “may be established on the basis of equality of opportunity”. , The proponents of a Chicago Convention-based deal would argue that these provisions privileging uniform global treatment and the unique nature of the international aviation sector create a legal basis for avoiding the use of arrangements for aviation (or shipping) as a direct legal precedent for the climate regime applied to states or to other sectors. Of course this notion is challenged by developing countries that prefer a deal based on the provisions and principles of the UNFCCC.

The proponents of a *sui generis* agreement covering international aviation emissions argue:

- The multilateral process continues to be effective, and the UN system is capable of delivering ambitious, rule-based global outcomes that adequately reflect fairness, equity, sustainable development and the urgent need for action to reduce greenhouse gas emissions.
- The UNFCCC is the only legitimate forum for broad multilateral coordination of action on climate change; yet actions in specific sectors or in respect of specific emission sources could also be taking place elsewhere. Action through other fora and organizations will be essential to stabilise emissions at sustainable levels – for aviation through ICAO. The UNFCCC might request more specialized bodies to undertake specific tasks, and / or such fora could define themselves as making a contribution to the overall effort to tackle climate change. Maintaining an overview of action by many actors at different scales is essential to ensure an adequate response.
- International transport – aviation and maritime transport – are uniquely global sectors that require coordinated international action, and measures to address emissions from these sectors does not prejudice outcomes of negotiations in other sectors.
- There are practical ways of applying the principles of CBDR&RC and Special Circumstances and Respective Capabilities to climate mitigation measures that ensure fairness, equity, sustainable development and environmental integrity. These enhanced interpretations may be appropriate to certain sectors and contexts, and not universally in all contexts.

Potential precedents for which there is likely to be strong opposition from developing countries:

- Global emissions targets to be set, and measures implemented to address them, without addressing differences in national circumstances and CBDR&RC in the implementation of such measures. (Ultimately, a sustainable development approach still requires that emissions stabilization should allow development to proceed in a sustainable manner; we need to balance climate and development imperatives in a fair and equitable regime.)
- Deviating from the principles of the UNFCCC.
- Emissions from other economic sectors or activities in general (e.g., iron and steel, cement, agriculture, etc.) to be covered by uniform global measures that do not discriminate between countries and market actors.
- Sectoral approaches as the basis for future global climate agreements under the UNFCCC.
- Global market based approaches *a priori* as the primary basis for future global climate agreements under the UNFCCC. (Even under ICAO the entire basket of measures should be considered and the work on non-market based measures must form part of a package deal.)
- Any transfer of resources from the south to the north, or any approach that has inequitable and unfair distributional impacts.

Potential precedents for which there is likely to be strong opposition from (some) developed countries:

- Agreeing to CBDR&RC as the basis for burden-sharing in controlling aviation emissions.
- Maintaining the existing AI/NAI political categories without provision for graduation.

- Recognition, implicit or otherwise, that the developmental challenges of large emerging economies justifies differential treatment from developed countries, either in terms of regulation of airlines or in the use of resources generated by carbon pricing. (Policies adopted for sectoral approaches in general should differentiate between the sectors in different countries based on the development conditions of the respective countries.)
- Any approach that explicitly recognizes that developing countries have the right to access to planetary resources on an equal per capita basis, or to achieve the development and consumption levels of developed countries without decarbonising.

Concern about setting the latter kinds of precedents is perhaps one (but likely not the only) key factor contributing to resistance to agreement on a global MBM for the aviation sector on the part of many countries. But that is only at the tactical level. At the most fundamental level this is not a tactical issue, but about fairness, equity and the right to sustainable development in all three of its dimensions.

If a way could be found to ensure that an acceptable (to developing and developed countries alike) enhanced interpretation of CBDR&RC specific to international aviation does not set (legal or political) precedents for the negotiations under the UNFCCC, a major barrier to progress would be removed. A solution (in addition to its substantive dimensions) could be to explicitly recognize and address the fear for creating precedents in the very unique transnational aviation sector. Solutions found for that sector does not necessarily apply to, and should in no way prejudice the broader climate negotiations—whether seen from the perspective of a developed or a developing country.

Annex A: Options identified by ICAO Expert Group

The Experts Group created under the ICAO Council has analyzed a range of potential measures to address the Special Circumstances and Respective Capabilities of developing countries CBDRRC, which serves as input to consideration by the High Level Group. The options and how they may be implemented are considered below. Several options can be combined with others.

Type 1: Measures based on differential treatment in the form of additional time to comply, varying obligations or an exemption

i) Differentiated treatment of participants based on the maturity of aviation markets or economic development. Under this option, there could be differential obligations for regions or States. For example, routes within the North American and European markets could be expected to contribute more to the overall goal than those in Africa. Where flights take place between regions, the lowest level of obligation would apply. Regional-based obligations will include States at different stages of development so a State-based approach is preferred. Industry bodies such as AEA and the Aviation global deal Group have previously discussed a global trading scheme with three tiers of obligation. The tiers could be identified on economic development criteria and/or the maturity of aviation markets. However, in many cases there will be a close correlation between maturity and development. During WWF working group discussions, the group noted the need to avoid setting the thresholds based on percentages (as is the case with the current ICAO de minimis which is set at 1% of RTKs – revenue ton kilometers). An absolute threshold will allow states to become subject to more stringent obligations as they develop. In contrast, a political delineation, say between Annex 1 and non-Annex 1 is static and cannot account for changes over time.

ii) Exemption thresholds could be implemented at the State level, the operator level or on specific routes. In many ways, this shares similar properties with the differential treatment of participants except that the measure provides an exemption instead of varying the obligation. Developing countries have expressed an interest in this approach but the criteria for defining the threshold are controversial. Many can support economic criteria such as per capita GDP while others want to retain existing political distinctions such as Annex 1/non-Annex 1 in UNFCCC. The advantage of economic criteria is that it can be set at any level based on need, rather than treating all developing countries the same way.

iii) Phased implementation establishes different implementation timeframes for the phasing in of MBMs. Under this option, routes to/from States would only enter the MBM after a period of say 5 years. Several phases could be identified with those with the lowest levels of economic development afforded the most time. Again, this option has common characteristics with i) and ii) as it requires a definition of market maturity and/or economic development status in order to classify countries. It could be preferable to exemptions as it implies all states will participate after a given period has elapsed.

iv) Emissions units are sourced, or acquired, only from specific countries in order to support development and investment in those countries. For example, under an offsetting approach, participants could be instructed to invest in CDM projects in specific States, such as the LDCs. This could lead to problems of supply with an associated impact on cost.

Type 2: Use of revenue to address differentiation in the context of measures with global participation

v) Revenue channeling where a global MBM scheme includes revenue generation. MBMs are applied equally to all participants but revenue could be channelled back to specific countries based on their special circumstances and respective capabilities and/or channeled to a central fund such as the Green Climate Fund and distributed in accordance with the Fund's programme. Finance could be returned to a set of developing countries through a rebate mechanism based on an appropriate rebate key, such as share of fuel uplifted, to ensure there is no net incidence on those countries. This would allow all carriers to participate from the start of the MBM, reinforcing the global coverage and having the maximum impact on emissions. Unless using existing platforms like the Green Climate Fund, criteria would still needed to establish the beneficiaries and the scale of funds required. The WWF working group noted that this option had potential to address developing country concerns, especially from a tourism perspective, but that members of ICAO's High Level Group had shown little enthusiasm to date. Addressing revenue has the potential to address the distributional implications, and to ensure 'no net incidence', or reducing the incidence in countries that are still seeking to lift millions out of poverty. Developing countries may be more supportive if they received income that compensated them for any burden or incidence of the MBM, and this could be done in a way that results in no trade distortions.. There is a strong preference for central revenue collection as revenue collected by Finance Ministries may not be used/released for intended purposes. However, this has its own problems as giving the authority to a central international entity may require a treaty that could take a long time to negotiate and approve. Delegating functions to an existing entity like the Green Climate Fund would avoid some of the administrative complexity in creating a new body.

vi) Technical assistance/cooperation facilitating the provision of technical and financial assistance, and access to existing and new financial resources, technology transfer and capacity building.

Other design criteria

All the options require criteria to identify and assess the needs of States. All the options fall into one of two categories: global participation with revenue used to differentiate between countries with different circumstances and capabilities, or; differential treatment in the form of additional time to comply, varying obligations or an exemption. While all the measures could be applied to carriers from these States, this would create competitive distortions. For this reason, a route-based approach is preferred with all carriers on a given route treated equally irrespective of nationality. There are other dimensions to this debate, most notably the need to accommodate the needs of states where early action has been taken and those who are experiencing fast growth.

Early action treatment could recognise the efforts of participants who have taken action to improve fuel efficiency prior to the implementation of the scheme. A distribution that is based solely on historical emission levels will not reward early action directly, although it will reduce the additional effort required to comply with the obligation. There are several ways to approach this but the most practical is to factor efficiency into the baseline used for distribution of obligations. In the EU ETS, 3% of allowances are set aside for fast growth (defined as in excess of 18% growth in a year) and new market entrants.