

Reconciling differential treatment and the international regulation of aviation emissions

Introduction

Greenhouse gas emissions from international aviation have risen sharply in the last two decades. From 1990 to 2012, as global carbon dioxide emissions from fossil fuel combustion rose by 53%, CO₂ emissions from international aviation fuels grew by more than 86%, to 478 million tonnes (Mt), or about 1.5% of global CO₂ emissions from fossil fuel combustion.¹ In China, international aviation emissions grew more than fivefold in that period, and in the rest of non-OECD Asia and the non-OECD Americas, they tripled. Given the growing role of aviation in the global economy, the International Civil Aviation Organization (ICAO) expects the sector's emissions to rise to 682–755 Mt CO₂ by 2020.²

Yet despite more than two decades of discussions about the need to reduce emissions from aviation, there is no meaningful regulation in place to do so. Progress has been limited, both within ICAO and under the United Nations Framework Convention on Climate Change (UNFCCC). One of the main challenges has been how to establish responsibilities for emissions and, subsequently, how to distribute the limitation and reduction burdens. A key question in this regard concerns the role of the UNFCCC's principle of common but differentiated responsibilities and respective capabilities (CBDRRC) in the international regulation of aviation emissions.

CBDRRC has been increasingly invoked in two important venues that seek to regulate aviation emissions outside of the auspices of the UNFCCC: ICAO and the EU. However, international regulation of aviation follows the principles of non-discrimination and equal opportunities, which are embodied in ICAO's founding charter, the Chicago Convention. These principles calling for equal treatment for airlines may come into conflict with the principle of differential treatment put forward in the climate regime. This policy brief examines options for reconciling the two.



Aircraft from Cathay, Emirates, Air New Zealand & Thai Airways at Auckland Airport in New Zealand.

Key findings

- Progress in the regulation of international aviation emissions will require overcoming the apparent conflict between the principle of differential treatment, widely used in international environmental law, and that of equal treatment, which is a central tenet of international aviation law.
- Recent developments at International Civil Aviation Organization (ICAO) and the European Union (EU) indicate that policy-makers in both venues have shifted positions, to embrace differential treatment in favour of developing countries in the regulation of international aviation emissions.
- This new acceptance of differentiation is based on more flexible approaches than those found in the international climate regime, following the use of contextual norms that distinguish among countries on the basis of circumstances that may change over time, as well as norms applied at the implementation level (e.g. linked to financial, technological and capacity-building assistance).
- The contextual treatment approach may be better suited to accommodating both differential and equal treatment in any future regulation of international aviation emissions, as it allows for forms of differentiation that are better suited to the realities of the sector.

Differential treatment in the UNFCCC

Differential treatment of countries, as embodied by the notion of CBDRRC, is a core principle of the UNFCCC. CBDRRC is articulated through differential treatment with respect to central obligations (e.g. the Kyoto Protocol's emission targets only apply to developed countries), as well as differential treatment in the implementation of commitments, with developing countries receiving assistance in a variety of forms (financial, technical, capacity-building).

CBDRRC reflects the idea that while there is a common responsibility to deal with climate change, the biggest share of the effort to mitigate and adapt to climate change is to be borne by developed countries. However, the principle is open to diverging interpretations. As a result, its precise contents and application in the future of the climate change regime remain contested.

Specifically, the division of developed (Annex I) and developing (Non-Annex I) countries, as crystallized in the Kyoto Protocol, has been criticized as a distinction that no longer reflects geopolitical, economic or environmental realities. This criticism has found its way into the development of the climate regime, in which a trend towards a more tailored – or contextual – approach can be observed (see box). Such a contextual approach highlights countries' national circumstances, such as their relative capacity and vulnerability, and could in practice lead to more, not less, differentiation.

Differential and contextual treatment

Differential treatment aims to balance the international law principle of sovereign equality of states with the need to foster international cooperation, via the allocation of special rights or entitlements to developing countries. It is commonly used in international (environmental) law, in several ways, including through the principle of CBDRRRC.

There are two types of provisions accommodating differentiation: differential treatment norms and contextual treatment norms. While the first type simply grants favourable treatment to developing countries, the second provides identical treatment to all countries, but their application either requires or permits differentiation by considering factors that vary among countries. Contextual norms can thus also take into account a change in circumstances. This flexibility offers a way forward for the application of the CBDRRRC principle; however, the indeterminacy inherent to contextual norms also has drawbacks, since the lack of precise characteristics in the norm makes its specific application easily contested.

The CBDRRRC principle covers both substantive aspects (e.g. emission reduction obligations) and procedural aspects (e.g. membership in treaty bodies, voting procedures). Norms differentiating with respect to the substantive aspects of an agreement can apply to the central obligations or their implementation in two ways: (1) norms can establish differences in the ways through which compliance can be achieved (e.g. more favourable time frames for developing countries); and (2) they can grant assistance (financial, technology transfer or capacity-building).

The combined use of these substantive categories gives four basic possibilities through which the CBDRRRC principle can be put into practice:

1. Differential norms that apply differentiation to the main obligations of a treaty. The Kyoto Protocol is an example of such differentiation, with a closed list of developed countries taking on commitments to limit and reduce greenhouse gas emissions;
2. Differential norms that apply differentiation at the implementation level, either through flexibility in achieving compliance or by offering assistance. A notable example is the Montreal Protocol on ozone-depleting substances, which provides for a delayed time-frame for phasing out the production and consumption of halogenated hydrocarbons for developing countries, as well as financial assistance;
3. Contextual norms that apply differentiation to the main obligations of a treaty. An example can be found in the Basel Convention on transboundary movements of hazardous wastes, under which Parties are required to reduce the generation of waste while taking into account their economic and social conditions; and
4. Contextual norms that apply differentiation at the implementation level. For example, the World Heritage Convention establishes a system of international cooperation and assistance designed to support Parties in their efforts to identify and preserve their heritage. The provision of assistance depends on the particular circumstances of the country requesting help.³

Dealing with differentiation in ICAO

At the 37th ICAO Assembly in 2010, governments agreed to non-binding goals of improving fuel efficiency by 2% per year and making growth from 2020 onward “carbon-neutral”. The latter would be achieved primarily through a new market-based mechanism to be fully implemented in 2020. The form of that mechanism is due to be agreed upon in 2016; three



A plenary session at the Bonn Climate Change Conference, June 2015.

broad options are being considered: an offset scheme, an offset scheme with revenue (i.e. with a fee per unit traded), and a global emissions trading scheme.

It is unclear whether, and if so how, the new market-based mechanism would differentiate between developing and developed countries. Although ICAO’s core principles of equal treatment collide with the principle of CBDRRRC, the latter has gained prominence and has been partially acknowledged in ICAO since the 37th Assembly in 2010. The Assembly acknowledged that the mechanism should accommodate “the special circumstances and respective capabilities of developing countries”.⁴ Two of the proposals for a market-based mechanism under discussion include differentiation: through the offsetting mechanism (targeting emission reductions in developing countries similarly to the Kyoto Protocol’s Clean Development Mechanism), and through the redistribution of revenues levied as part of the offsetting mechanism.

The emerging approach to differentiation in ICAO can also be observed in the incorporation of differential treatment in market-based mechanisms established by individual states. ICAO guidelines suggest exempting routes to and from developing states whose share of international civil aviation is below 1% of total revenue tonne kilometres⁵ of international civil aviation activities. In practice, this would exempt most airlines based in African countries, for example (and others flying to and from those countries).

The guidelines also suggest the use of *de minimis* exemptions (i.e. contributions to emissions are so low as to warrant exempting them from a law or scheme), or the phased implementation of the market-based measure on particular routes or in markets with low levels of international aviation activity, particularly those serving developing states. In addition, the guidelines support the idea of using revenues from market-based mechanisms (e.g. auction revenues) to provide assistance and support to developing states, in addition to reducing the environmental impact of aviation.

ICAO has also embraced differentiation by providing assistance to developing countries for the implementation of State Action Plans for emission reduction activities. In 2013, ICAO, the United Nations Development Programme (UNDP) and the Global Environmental Facility (GEF) initiated a partnership aimed at stimulating the implementation of

low-emission aviation measures in developing countries. The country eligibility criteria for the ICAO-UNDP-GEF project are likely to follow those used by the International Monetary Fund or the World Bank list, which provide flexible and up-to-date listings of countries according to their economic status. This measure accommodates the needs of developing countries in implementing an otherwise equal treatment measure.

The articulation of CBDRRRC through contextual rather than differential norms seems to better accommodate the changing realities and particularities of the aviation sector, such as the steep growth of the sector in countries such as China and India or the special situation of dependency of certain island states. The move towards contextual provisions applying differential treatment at the implementation level in ICAO reveals a willingness to accommodate political elements and a shift towards the “and respective capabilities” part of CBDRRRC.

Dealing with differentiation in the EU

Frustrated with the lack of progress within ICAO, the EU included international aviation emissions in its emissions trading scheme in 2008. This measure would cover emissions from all flights departing from or arriving to the EU from 2012 onward. However, significant political resistance from other countries (including China, India, Russia and the United States) led to the deferral of the enforcement of the legislation for non-European countries in 2012 (through the so-called “stop-the-clock” decision). In 2014, the European Commission proposed amending the legislation to reduce its scope to emissions over EU territory only, while keeping international flights in the scheme. However, this proposal was also unsuccessful, as the European Parliament voted against it. As a consequence, the EU adopted a new temporary derogation for international flights up to 2016.⁶

Only one provision of the 2008 EU Directive reflects any notion of differential treatment of developing countries, and it merely encourages using the revenues raised by EU Member States to finance climate mitigation and adaptation in the EU and other countries, “especially developing countries”. However, the European Commission’s Impact Assessment of the Directive explicitly refers to CBDRRRC and maintains that the Directive conforms to that principle, given that CBDRRRC applies to countries and not to businesses, and because equal treatment is the only basis for the Directive.



A KLM flight approaches the airport in St. Maarten.



The ICAO Headquarters in Montreal

However, there has been an apparent U-turn in the EU’s policy on differentiation with regard to international aviation emissions. Specifically, the failed 2014 proposal amendment included contextual norms applied to the main obligations. This was done by exempting flights to and from developing countries with less than a 1% share of total revenue tonne kilometres of international aviation. The proposal defined “developing countries” through the criteria of countries benefiting from preferential access to the EU market – namely those which were not classified in 2013 by the World Bank as high-income or upper-middle income countries. This excludes big emitters such as China, for example.

Additionally, the EU and ICAO launched an assistance project to mitigate emissions from aviation in developing countries through capacity-building. The project specifically targets countries in Africa and the Caribbean, and focuses on the development of reporting programmes, infrastructure and reductions in fuel consumption, through ICAO’s State Action Plans on emissions reductions. This measure can be viewed as applying a differential norm focusing on implementation and assistance, as it singles out specific beneficiary countries. As such, this example highlights the value of contextual norms and the implementation model, in this case through assistance, in putting the principle of CBDRRRC in practice.

The road ahead

The outcome of the next Conference of the Parties (COP) to the UNFCCC, taking place in Paris this December, will be highly relevant for the regulation of international aviation. First and foremost, it will determine whether a legally binding and comprehensive international climate change agreement is adopted. It will also determine whether emissions from

international aviation are covered under the new agreement, or it could explicitly mandate ICAO to step up its efforts – something the organization has not been able to do ever since it was first charged with negotiating emission reduction measures for the sector as part of the Kyoto Protocol.

Moreover, the way in which the CBDRRRC principle is reflected in the Paris agreement will likely affect the way in which the effort of reducing international aviation emissions is distributed. The ongoing negotiations and agreement in Paris will thus have an impact on the work of

ICAO ahead of its Assembly in 2016, when the form of the market-based mechanism is to be agreed upon.

Reconciling equal and differential treatment in efforts to reduce emissions from international aviation appears increasingly viable. New approaches focused on contextual treatment and differentiation at the implementation level provide a promising foundation for meaningful regulation that accommodates the sector's realities, while acknowledging the special circumstances of developing countries.



A SriLankan Airlines flight arrives at London Heathrow Airport.

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Policy recommendations

- Notwithstanding the essential role of the UNFCCC in orchestrating a global response to climate change, it seems more appropriate and realistic to negotiate the regulation of the aviation sector's international emissions within ICAO. This would help relieve the negotiation burden for climate change negotiators, and would offer ICAO a chance to live up to its promise to agree on a market-based emissions reduction mechanism by the time of its next Assembly in 2016.
- To foster consensus on a market-based emissions reduction mechanism in ICAO, it will be essential to overcome conflicts between differential and equal treatment. By clarifying the contents and application of the CBDRR principle, climate change negotiators can send a clear signal about how they would prefer ICAO to deal with these types of emissions.
- Notwithstanding recent developments, ICAO is unlikely to embrace full-fledged differentiation over equal treatment. Compromise solutions will be needed. In this context, negotiators in both the climate and aviation regimes should pay attention to the options offered by contextual differentiation and differentiation in implementation and assistance.
- Efforts to accommodate differential treatment in ICAO reflect a similar shift to the one observed in the EU. Experimentation at ICAO and the EU levels with contextual norms and norms granting financial assistance to developing countries is leading to the application of the CBDRR principle in practice. Acknowledging and promoting this effort is likely to help reach an agreement over a future market-based mechanism for the sector.

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- ¹ IEA (2014). *CO₂ Emissions from Fuel Combustion: Highlights 2014*. International Energy Agency, Paris. <https://www.iea.org/publications/freepublications/publication/co2-emissions-from-fuel-combustion-highlights-2014.html>.
- ² ICAO (2013). *ICAO Environmental Report 2013: Aviation and Climate Change*. International Civil Aviation Organization, Montreal. Available at: <http://cfapp.icao.int/Environmental-Report-2013/>.
- ³ Examples, except from the Kyoto Protocol, are taken from Magraw, D.B. (1990). Legal treatment of developing countries: differential, contextual and absolute norms. *Colorado Journal of International Environmental Law and Policy*, 1. 69-99.
- ⁴ ICAO (2013). *Report of the Assessment of Market-based Measures*. International Civil Aviation Organization, Montreal. Available at: http://www.icao.int/Meetings/GLADs-2015/Documents/10018_cons_en.pdf.
- ⁵ Revenue tonne kilometres is the revenue load (sold capacity for passengers and cargo) expressed in metric tonnes, multiplied by the distance flown.
- ⁶ For a summary and key documents, see <http://ec.europa.eu/clima/policies/transport/aviation/>.

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