

Reaching a Consensus on Aviation Emissions

April 2016

In February 2016, His Highness Sheikh Mohammad Bin Rashid Al Maktoum, Vice President and Prime Minister of the United Arab Emirates and the Emir of Dubai, announced a major Cabinet change. Amongst the changes, was the announcement that the UAE Ministry of Environment and Water will be reorganised and renamed as the Ministry of Climate Change and Environment. In the UAE there will be a greater focus on emissions and pollution and the renamed Ministry of Climate Change and Environment will re-orientate its priorities around climate issues.

As far as the aviation industry is concerned, the issue of a consensus on how to deal with the limitation of aviation emissions is reaching a crucial phase, and it will be a major topic for discussion and possible agreement at the forthcoming 2016 International Civil Aviation Organisation ('ICAO') General Assembly in Montreal in September 2016.

ICAO's Governing Council is set to adopt a new carbon dioxide emissions standard for civil aviation and it may well be proposed that this new standard will come into effect from as early as 2020. The standard which the ICAO Committee on Aviation Environmental Protection has unanimously recommended, will apply to new aircraft designs starting from 2020. New deliveries of all aircraft types under current production will be required to adopt the new standard from 2023, with a phasing scheme which will have a 'cut off' point in 2028.

The proposed standard will be especially stringent for large and long haul aircraft, given that ICAO claims that 90 percent of international aviation emissions are generated by larger aircraft over 60 tonnes.

The new rules will be submitted to the ICAO Assembly in September for endorsement and subsequently the new standard will be put to the 36 member ICAO Council in early 2017 for agreement and implementation. The ICAO Council President, Mr. Olumuyiwa Bernard Aliu, has explained that "every step has been taken in support of ICAO's full basket of measures for environmental improvement and that negotiations have taken several years to conclude, so that there will be guaranteed reductions in carbon dioxide emissions."

It is worth stepping back to give a brief overview of the controversial history on how the aviation industry has sought to tackle aviation emissions and in particular how we have arrived at the present position. The encouraging atmosphere of negotiation and compromise has certainly moved on since global tensions erupted after the European Commission added international airlines to its Emissions Trading Scheme, and subsequently agreed to 'stop the clock' on implementing this scheme on non-EU operators. ICAO subsequently, in 2013, committed to tackle the impasse between the EU and other states by setting up working groups to address the technical and political dimensions of how to control and limit emissions. A mandate was given to ICAO to agree to the design of a global mechanism at its next ICAO Assembly in 2016 for introduction in 2020.

The original EU aviation Emissions Trading Scheme (Directive 2008/101/EC) ('Aviation ETS') was published on 16 January 2009 and entered into force on 2 February 2009. The Aviation ETS introduced a system with legally binding Monitoring and Reporting Guidelines for airlines to record their emissions and requirements for airlines to show 'tonne-kilometre data' at the same time, with various time limits for general

implementation across the airline industry.

The Aviation ETS was designed to apply to all aircraft operators worldwide whose flights were to arrive at, or depart from, an EU airport from 1 January 2012 (subject to certain thresholds and exemptions) so that, from 2012, flights arriving from and departing to third country destinations as well as intra-EU flights would fall within the scope of the scheme.

The original idea was that the scheme would operate in trading periods and each trading period would cover 5 years, with the first trading period for aviation starting in 2012. The overall aim of the scheme was to cap carbon dioxide emissions from airlines by using a 'cap and trade scheme' within the framework of a general Emissions Trading Scheme ('General ETS') throughout the EU.

The General ETS, which started on 1 January 2005, covers almost 11,500 industrial installations within the EU, which together are responsible for nearly half of all carbon dioxide emissions. Operators of these installations receive emissions allowances giving them the right to emit at certain level of the carbon dioxide a year. The total of these allowances creates a 'cap' on overall emissions from these installations, and each year the operators of the installations must surrender a number of allowances equal to the actual emissions in that year. The incentive for the market in which these allowances can be traded enables participating companies to manage their emissions cost effectively. The intention of including the aviation sector in the General ETS was to allow aircraft operators to be allocated emissions allowances, thus providing a permanent incentive to reduce their climate impact, and provide flexibility to buy or sell allowances as necessary.

Several airlines outside of the EU fundamentally objected to their unilateral inclusion within the Aviation ETS and at the last tri-annual ICAO Assembly in September 2013, member states agreed to consider an alternative global market-based measure (MBM) to address airline industry emissions growth and to try and convince states to put aside their differences and agree a common road map. As a result, the member states at the ICAO Assembly in September 2013 agreed to report back at the next Assembly in September 2016 with a proposal for a global MBM scheme for international aviation that could be implemented by 2020. Negotiations have been taking place ever since 2013 in order to achieve this, and the proposal to adopt a new industry standard at the ICAO Assembly in September 2016 is a direct result.

Nevertheless, there are consistently differing views on how any future MBM scheme will operate in practice. The International Airline Travel Association (IATA) has made it clear that it would prefer the MBM to take the form of a mandatory carbon offsetting scheme to be applied to emissions growth post-2020 using the industry's average annual emissions between 2018 and 2020 as a baseline. Its proposal includes provisions to recognise early movers, to accommodate new market entrant airlines allowing them to get their operations off the ground, and to take account of fast growing carriers. Other options on the table at the ICAO Assembly include the revenue generating carbon offsetting scheme where funds raised are used to help developing countries tackle climate change. There are also, of course, strong proponents for an emissions trading system along the lines of the EU's controversial Aviation ETS scheme.

Interestingly, the US Environmental Protection Agency took its first steps towards regulating carbon emissions from US airlines in June 2015 whereby it published findings that greenhouse gas emissions from commercial aircraft engines may endanger public health, and issued an advance notice of proposed rulemaking to seek input on potentially adopting ICAO emissions standards in the USA. This development has occurred in advance of ICAO's release of its proposed standard for carbon dioxide emissions for discussion at the ICAO Assembly later this year.

Clearly, aircraft emissions will be an important issue for the forthcoming year. Since the last tri-annual ICAO Assembly, there have been several rounds of global aviation dialogues ('GLADs') to try to negotiate and finalise the MBM scheme for international aviation. Several two-day GLADs were conducted in April 2015 taking place in Cairo, Lima, Madrid, Nairobi and Singapore and a second round of GLADs is scheduled for the spring of this year, by which point it is hoped that the MBM proposal will be in a more

finalised shape. ICAO's intention with these MBM dialogue sessions is to make sure that there will be simplicity and cost effectiveness within a global scheme, with a need for differentiation between airlines, and the goal of avoiding excessive costs or administrative burden. There will be many differences between developed and developing nations on what form the MBM will take, but a global MBM will be extremely important in helping the aviation industry achieve its target of carbon neutral growth.

As ever, advanced aviation technology is also an important factor in delivering reductions in emissions: the usage of sustainable aviation fuels, newer and cleaner engines, and commitments from airlines to deliver engineering alternatives will also be a vital component in achieving reductions in emissions in conjunction with the forthcoming measures to be discussed in September 2016. Airlines with young, modern fleets of new aircraft types will lead the way, and it is hoped that Middle Eastern airlines will be at the vanguard of these modern technologies in the years to come.