

Issues of International Airport Facilitation & Environmental Impact of Aviation in Asia-Pacific

by

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Introduction

- The PECC International Roundtable is most timely especially now that air transport is slowly emerging from its worst crisis ever and especially since our industry is confronted not only with major changes, but also with the come-back of a number of more permanent challenges.
- These new challenges have been largely and eloquently covered by the previous speakers. Let me focus on some recurring challenges that might also impose some changes in the way we tackle them – since the very fact that they are recurring could suggest that a new approach is necessary in order to properly address them!
- The two topics I have been asked to discuss – facilitation and environment – belong to the category of permanent aviation challenges. This is their first distinguishing feature. Their second common feature is their primary concern to airports. One could say that facilitation is 90% an airport issue while environment is 60% an airport concern. This is because certain new environmental challenges such as climate change tend not to have such a large impact at the local airport level – unlike the challenge of noise, for example – but rather to have worldwide implications. Facilitation and environment have a third corresponding feature in that both involve not only air transport stakeholders, but also other stakeholders outside our industry, such as immigration and customs authorities, in the case of facilitation, and local communities around airports in the context of the environment.

Facilitation

- Facilitation is (unfortunately) not treated as a permanent challenge for aviation, since it is mainly discussed in relation to specific events. These include, for example, SARS – which so dramatically affected air transport especially in this region earlier

this year – or security – such as those measures that were put in-place after September 11th. These security measures have had quite a dramatic effect on air transport facilitation worldwide, in particular in the USA where the *hassle factor* concept illustrates the negative impact that stringent and lengthy security checks can have on passenger numbers.

- Facilitation is indeed central to air transport's success in the mobility market, since without facilitation, aviation would lose its competitive edge versus other transport modes.
- As a former airport manager, and as a former ICAO official, I have always emphasised the importance of air transport facilitation. If procedures at airports are inefficient and lengthy; if ground access to airports and access from the terminal to the gate is complicated and stressful; if we have to queue for 45 to 60 minutes to go through immigration before having to wait for another hour before getting our bags... then air transport is not delivering the quality of service (in terms of its speed and comfort) that its customers have grown to expect – not only during the flight itself, but also on the ground pre- and post-flight.
- Let me give you an example, based on my own experience when I was in charge of Geneva Airport: In the early eighties, one of the first high-speed rail links was opened between Paris and Geneva, thus reducing the duration of the rail trip from six to three hours. The high-speed rail connection immediately created an attractive alternative to air travel between the two cities, since the total trip duration from city centre to city centre was virtually the same: i.e. three hours by rail, since the train stations are downtown, and three hours by air – since we have to add to the one hour flight, one hour before take off and one hour after landing to cover the airport formalities and the access to and from the city centers.
- While it is very difficult to reduce actual flight times, it is easier to shorten the portion of the trip that takes place on the ground. This can be done through facilitation improvements such as simplifying access to the airport, accelerating check-in procedures, improving security and immigration controls, etc. In doing so, you shorten the portions of the trip that are the least “customer-friendly”; those which customers are tempted to criticise when rating airports according to their facilities.
- I am pleased to note that Changi Airport here in Singapore has always been ranked among the best platforms in the world in terms of facilitation, and that Asian hubs are generally recognised as efficient and comfortable airports when compared with their North American and European counterparts. However, further progress must be made, virtually everywhere.
- And this progress can be made at a reasonable cost, since improved facilitation is often cheap to achieve when compared to other aviation challenges. Facilitation may require huge investments to create, for instance, a dedicated rail link to the airport site or to double security controls in terminals. But in many cases, facilitation requires first and foremost a change in staff mentality together with better organisation and work distribution.
- Without being provocative, let's recognise the fact that check-in operations, immigration and customs control procedures, even security checks can be speeded up without compromising their requirements. It's mainly a “human factor” issue: everyone in the air transport chain, on the ground and in the air, must understand that he or she contributes to the success of that chain by acting with efficiency and professionalism. Facilitation does not imply reducing or neglecting any procedures, but applying speed and dedication in fully exercising the required controls.
- Education, training and automation must be further developed to improve the situation. And, of course, this is no easy task, especially when we are dealing with people and authorities who are not part of the air transport industry *per se*.

Environmental challenges

- I have mentioned several times the question of ground access to the airport. Let me emphasise that ground access is both a facilitation and an environmental issue, since a suitable rail link between a city and its airport does not only improve airport access but also the air quality around the airport – an issue which, together with noise, is an important consideration – possibly more so in Europe than elsewhere at present.
- At London Heathrow for example, one of the main obstacles to the approval of a third runway by the UK government – a topic which is very high on the political agenda these days – is related to the level of nitrogen oxides (NOx) in the airport vicinity. As you know, the air quality around an airport is not only affected by aircraft operations, but also by ground activities, in other words ground traffic related to airport operations and, more importantly, road traffic related or unrelated to air traffic. This is why rail and metro links between city centres and airports are increasingly valuable tools with which to reduce road traffic and thus improve air quality around airports.

Noise

- Nevertheless, noise linked to air transport remains the main environmental issue and the major obstacle to growth and airport capacity adaptation to that growth if it is not properly tackled.
- How does one tackle noise to address both local requirements for measures adapted to the local situation and global requirements to preserve the interest of air transport as a global industry ? Today, this is the most important noise-related challenge, a challenge that is addressed through the *Balanced Approach* concept, as endorsed by ICAO.
- What does it mean? It means that the noise management at airports should be based on the most cost-effective measures, according to the magnitude of the problem at local level. Not all airports face the same noise problems, but if noise abatement measures have to be taken, they should be selected from the following four categories:
 - noise reduction at source
 - land-use planning and management
 - operational noise abatement procedures
 - aircraft restrictions
- The balanced approach urges national authorities and local airport operators to implement only, among these four categories of measures, those which are the most cost-effective and the least damaging for the industry. The balanced approach, for instance, urges airports not to immediately restrict or ban the noisiest Chapter 3 aircraft if other measures achieve a similar result at a lower cost – and after proper consultation with the airlines, as main users.
- The balanced approach to noise management has started to be implemented, notably in Europe where, as you probably know, night restrictions and curfews are growing in response to local pressure when new runways or terminal expansions are reviewed. IATA has been playing an active role in this area on behalf not only of local European carriers, but also foreign ones that are affected in their long-haul operations to and from Europe. There is no doubt that the balanced approach concept enables night restrictions to be considered in a more balanced way and not imposed as an automatic outcome of any airport development.

Climate Change

- The other main environmental challenge that our industry faces today is related to global emissions, in other words to aviation's contribution to climate change, through fuel consumption during all phases of flight.
- Aviation is not a major contributor to climate change. According to the United Nations experts (Integrated Panel on Climate Change - IPCC), aviation represents 3.5% of all CO₂ and other greenhouse gas emissions provoked by human activities. Strictly speaking, therefore, more than 95% of the climate change problem has nothing to do with aviation, but rather with road traffic, heating systems and many other industrialised activities.
- However, our industry's problem is that operational and technological measures will be insufficient in the coming decades to balance our industry's foreseeable growth. In other words, aviation's contribution to climate change is expected to grow – from 3.5% today to 5 to 6% 50 years from now – while emissions in other sectors will tend to diminish.
- Should air transport's growth, therefore, be limited? Should our industry take specific measures to reduce its potentially growing climate change impact? These questions are on the top of our agenda, especially because the International Civil Aviation Organization (ICAO) is expected to consider major policy options in the coming months leading up to the next ICAO Assembly that will take place in September 2004.
- ICAO has a global mandate to deal with these issues, based on the 1944 Chicago Convention and the famous 1997 Kyoto Protocol that gives ICAO the remit to identify environmental solutions for international civil aviation. The air transport industry as a whole actively contributes to ICAO's work in this regard, on the understanding that ICAO is the only worldwide aviation forum that can deal with this question on behalf of its 188 member States.
- So far, three types of measures are being explored as market-based options to deal with climate change:
 - taxes and charges
 - voluntary agreements
 - emissions trading
- Our industry is clearly opposed to taxes and charges on emissions for many reasons that will take too long to enumerate. The main reason is that taxes and charges are not efficient in environmental terms, since they only reduce air transport demand in a very limited way, while mainly affecting air transport demand from certain segments of society such as holiday makers, senior citizens, etc.
- Voluntary measures are recognised today as the most cost-effective way to reduce emissions – through technology gains and fleet renewal, operational and other fuel saving measures, air traffic management (ATM) improvements, etc. ATM improvements alone have the potential to reduce 6-12% of airline fuel consumption at worldwide level if proper decisions are considered now.
- When I say "now", I mean in less than three weeks from now! A major air navigation conference will be taking place at ICAO's headquarters in Montreal where air traffic management, communications, navigation, surveillance (ATM_cns) improvements are to be considered. Through IATA, the air transport industry plans to submit a number of specific and decisive recommendations to this conference. I invite you to urge your national delegations attending the ICAO conference to support IATA's recommendations.
- Looking beyond voluntary measures and to the longer-term, ICAO is currently studying the pros and cons of open emissions trading schemes for aviation. Emissions trading is a mechanism based on the selling and purchasing of CO₂ permits within an industry or between industries, on the understanding that CO₂

reductions should take place where they are the most cost-effective. What aviation cannot achieve on its own could, for example, be achieved in other industries reducing their emissions and financing this reduction through the selling of CO2 permits.

- Is emissions trading an acceptable solution for aviation ? What would the cost implications be? Would aviation have to accept an absolute ceiling imposed on its emissions or should we defend an approach based on fuel efficiency parameters? Should all air transport actors be treated in the same way to preserve fair competition or should the developing world benefit from exemptions as in the case of the Kyoto Protocol? Last but not least: should aviation explore alternative approaches to emissions trading? These pertinent questions are currently on the table to be properly answered before any global policy decision is taken. IATA, for instance, plans to adopt an airline position on climate change before the end of this year.

Conclusion

- It is essential to focus on cost effectiveness when dealing with environmental protection and to retain in this regard the instruments that deliver the maximum benefits for the minimum price. In the present circumstances, with the air transport industry emerging from its worst ever crisis, cost-effectiveness is, more than ever, a *prerequisite* for action, for voluntary measures rather than regulations, for technological and operational progress rather than taxes and charges.
- Air transport has already achieved a lot in environmental terms and significantly more so than most other industries – including, for example, a 75% reduction on noise at source and a 70% saving in fuel consumption. This fuel saving means that a figure of three litres of kerosene per passenger over 100 km is no longer uncommon in the air – which is comparable to the passenger consumption of a modern car carrying two people. The prospects for further progress in the coming decades remain very promising, in spite of the growing technological difficulties to make further progress, and in spite of their increasing costs.
- Whichever way you look at it, air transport's achievements and prospects for the future demonstrate the industry's dedication to environmental improvements. However, this is not fully recognised nor is it perceived as being sufficient – the reason being that aviation has an *image problem* in environmental terms.
- This has come about for several reasons. Let me mention just two of them. The first is related to the fact that the aviation sector has tended to work in relative isolation. For example, achievements in noise and emissions reductions have been discussed within the aviation industry, yet without proper communication and coordination with the rest of *civil society*. Whilst attending the World Summit on Sustainable Development (WSSD) one year ago in South Africa, I was impressed by the number of agreements on CO2 reductions and other commitments that were established between industries and NGOs. And I also became increasingly frustrated that aviation had made significant achievements in environmental terms but may have omitted to *share* these achievements with other stakeholders. This underlines the importance of a partnership approach not only within the industry but also with representatives of civil society.
- The second reason for the aviation industry's image problem is the perception of our industry as a whole. Air transport continues to be perceived as the transport mode of the privileged, wealthy upper classes, inaccessible to the vast majority of the population. Clearly, of course, this is changing (and quite rapidly). However, the perception of our industry has not yet adjusted accordingly. Furthermore, our image is increasingly being influenced by safety and security concerns, coupled with epidemic disease transmission.

- As an industry we must learn to be proactive rather than defensive – and the key to achieving this, we believe, is the development of partnerships. And it is on this point that I wish to conclude.
- Partnerships must be developed at local, regional and global levels to deal with the main challenges facing air transport in terms of infrastructure development, facilitation and environment.
- At the local level, airport operations and development do require, more than ever, a *partnership* approach with local neighbouring communities. The sustainability concept calls for this local dialogue to be broad enough to cover not only the environmental impacts, but also the socio-economic benefits of air transport. The idea here is for airports and local communities to share not only the negative aspects associated with airport activities, but also positive elements, including employment generation or development of aeronautical and related activities in the vicinity of the airport.
- The concept of sustainable development also calls for *partnerships* between various modes of transport, with a view to ensuring a better use of existing transport modes and to developing an integrated transport system at local or regional level.
- Last but not least, we have to promote *partnerships* at the global level, to deal, for instance with climate change issues, and to deal more broadly with development, considering the importance of air transport for the sustainable development of our global society, especially in the developing world.