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EXECUTIVE COMMITTEE

Agenda Item 17: Environmental protection

TOURISM, AIR TRANSPORT AND CLIMATE CHANGE

(Presented by the World Tourism Organization)

EXECUTIVE SUMMARY

Tourism – business and leisure travel - is a significant global industry making positive contributions to growth, trade and development, with particular potential for poor countries. Tourism is both affected fundamentally by climate change and a contributor to the global emissions of greenhouse gases (GHGs) – with air transport being a substantial contributor to total tourism emissions.

The United Nations system is developing a long term post Kyoto response to climate change. The World Tourism Organization (UNWTO), as the specialized UN Agency "with a central and decisive role in promoting the development of responsible, sustainable and universally accessible tourism", will work closely with other UN bodies including ICAO, UNEP and UNFCCC to support this activity.

UNWTO is seeking ways for tourism both to adapt to climate change and to mitigate GHG emissions while reinforcing the contribution of the sector to socio-economic development in general and the Millennium Development Goals in particular. UNWTO will hold its second multistake holder Conference on Tourism and Climate Change in October this year, followed by both a Ministerial Summit and its own Assembly in November, to build on the basic principles developed at its first Conference in 2003. A key component of the coming events will be enhanced coordination of market-based climate change mitigation initiatives between aviation and tourism authorities, in close consultation with the private sector.

Action: The Assembly is invited to:

a) agree that actions on GHG emissions from air transport need to be addressed more substantively from the broader perspective of the primary user, the tourism sector; and
b) support enhanced engagement between ICAO and UNWTO on climate change activities as regards adaptation, mitigation, new technologies and financing for development, with particular focus on market-based mitigation options such as emissions trading, carbon offsets, incentives and taxes, which can have needs and consequences reaching well beyond air transport.

Strategic Objectives:	This working paper relates to ICAO Strategic Objectives C - *Environmental Protection*, D - *Efficiency* and E - *Continuity*.

1. INTRODUCTION

1.1 Climate change is not an abstract concept for tourism. It is a phenomenon which already affects the sector and certain destinations in particular:

- most products directly incorporate some conditions that are vulnerable to climate change - winter sports, sun-and-sea, eco-tourism, are all at risk.
- many destinations are vulnerable - rising water levels will affect low lying coastal zones and small islands; snow line shifts will affect mountain resorts; desertification and deforestation will affect ecotourism sites; and temperature change will create serious impacts on traditional mass market venues.

Such developments require **adaptation**, with medium and long term planning by the industry to minimize the impacts and to adjust in the best ways possible to the phenomenon. This is most important where tourism is a source of development support and local community well-being in poor countries.

1.2 At the same time tourism contributes to the causes of climate change, largely through the transport of tourists, and there is a consequent need for **mitigation**. The tourism sector has a responsibility to minimise harmful emissions by encouraging sustainable, carbon-neutral transport solutions, to improve the use of natural resources (water, energy) and to contribute to the conservation of natural areas.

1.3 Tourism, like other sectors is capable of substantial reduction in its carbon emissions as a result of applying **new technologies**. For example, accommodations and restaurants can apply renewable energy (solar and wind); land transport can use cleaner energy and hybrid engines; aviation can benefit from technologies that shorten air routes and improve descent procedures, fuel consumption and conservation. Over the period to 2050 there are possibilities suggested by aircraft manufacturers and by IATA for alternative fuel powered and low emission aircraft.

1.4 There is a need for ensuring that the poorest countries, for which tourism can be fundamental to development, are capable of playing their part in the process of adaptation and mitigation, as well as benefiting from new technologies. This will require new sources of financing as well as refocusing existing sources to support climate-related initiatives.

2. DISCUSSION

2.1 UNWTO has been studying the interaction between tourism and climate change for some years. In 2003 the Organization convened in Tunisia a Conference on Tourism and Climate Change, a summit of public and private sector leaders which resulted in the Djerba Declaration on Tourism and Climate Change, setting out a sectoral framework for ongoing analysis and response. In order to take into account the progress made in knowledge and recent developments, UNWTO will hold this year the second Conference on this subject, with a technical segment from 1 to 3 October 2007 in Davos, Switzerland, supported by the World Economic Forum which will be followed by a Tourism Ministerial Summit in London, United Kingdom, on 13 November. The results will be considered later in November by UNWTO's own biennial Assembly session in Cartagena de Indias, Colombia and, last but by no means not least, will be input to the United Nations Climate Change Conference in Bali, Indonesia, in December. The Davos event is open to all interested parties from the public and private sectors. Details

may be found on the UNWTO website (www.unwto.org) which also contains details of the Organization's, climate related activities and its more extensive work on sustainable tourism (www.unwto.org/sustainable).

2.2 Air transport will form an important feature of the coming events, in terms of its contribution both to climate change and to economic development, particularly in regard to the poorest and emerging economies. Air transport is estimated as contributing to just under 40 per cent of GHG emissions from the tourism sector, including the domestic segment (which is much larger than international), exceeded by cars both on average and at shorter distances. Less precise estimates are currently available for international tourism, but air transport is undoubtedly the dominant contributor of GHG emissions both intra-regionally at longer distances and particularly inter-regionally.

2.3 The role of air transport in tourism is also highly significant. Over 40 per cent of the 840 million international tourists worldwide in 2006 arrived at their destinations by air. In many countries the proportion was much higher, reaching over 90 per cent for most long-haul island, landlocked destinations and developing countries generally. International tourism receipts reached 735 billion dollars in 2006, almost 900 billion including air tickets, making tourism not only a socio-economic driver but one of the largest categories of international trade. The tourism sector consequently has a key interest in environmental issues related to civil aviation and a fundamental stake in solutions sought. Conversely, the vast majority of the 931 million international passengers estimated by ICAO for 2006 are defined as international tourists (any traveller staying overnight in a foreign country, thus including the majority of international business travellers)[1]. Hence aviation is very much dependent on tourism.

2.4 ICAO has a key role in this regard, including its Kyoto Protocol mandate and the extensive work by CAEP leading to tighter standards on aircraft emissions and related operating procedures, as well as exploring voluntary and market-based measures and developing draft guidance on inclusion of air transport in the Emissions Trading Schemes of States. UNWTO follows ICAO's work closely. UNWTO has noted the legal, political and institutional challenges in developing a global Emissions Trading Scheme, the divergent views of some groups of States, as well as the support of the airlines through IATA for a voluntary scheme under the aegis of ICAO, to complement other GHG reduction strategies from public and private sources.

2.5 The UNWTO Climate Change Conference in Davos will review the results of the work of ICAO and other bodies on aviation in the broad context of other sectoral contributions, of the tourism product as a whole, and of the importance of tourism for poor countries. The Conference will also consider mitigation and adaptation approaches for the tourism sector including the role of market mechanisms encompassing carbon offsets as well as emissions trading, taxes and charges.

2.6 Initial research and discussion in preparation for the Conference has led to the following tentative conclusions regarding air transport and climate change, for further investigation and consultation:

a) that GHG emissions from air transport need to be addressed more substantively from the perspective of the primary user, the tourism sector;

[1] Including 91 million passengers on non-scheduled services. ICAO records passengers in terms of numbers on each flight; thus an international tourist travelling by air will count as at least two international passengers (inbound and outbound at destination, plus any connecting international flights).

b) that measures taken to reduce air transport emissions need to reflect coherence with strategies to reduce poverty and promote development in the world's poorest countries;

c) that all efforts to reduce emissions through improvements in airframe and engine technology, air traffic management and operational practices should be strongly supported;

d) that economic instruments need to be addressed in partnership by all the international governmental parties directly concerned, notably UNWTO, UNEP and UNFCCC itself as well as ICAO, and in close consultation with the private sector;

e) that funds collected from economic instruments should be applied to resolving the specific problems surrounding aviation and tourism rather than buried in general tax revenues;

f) that amongst economic instruments currently under consideration;

1) Emissions Trading Schemes show promise, particularly if at the global level they apply the principle of Contraction and Convergence, providing net economic benefits for developing countries and preferential measures for the Least Developed Countries;

2) the potential beneficial impact of carbon offset on total emissions can be questionable but the concept is worth further exploration on the basis of validation and certification of appropriately directed offsets;

3) levies (taxes, charges, duties) and incentives could lead to behavioural change affecting tourism as well as aviation, and should only be applied in the context of d) above;

g) that GHG emissions from air transport might be reduced without significantly affecting the socio-economic benefits offered by tourism through some substitution of alternative modes of transport for tourists for short haul and some adaptation of frequency of travel and length of stay for leisure tourism at both short and long haul; however, this would require fundamental behavioural and operational changes, particularly for short haul travel, and such developments must not impact on the growth of air transport to developing countries;

h) that a systemic approach with a combination of measures outlined above is more likely to provide effective long term solutions geared to developmental patterns;

i) that, whatever the approach taken for reducing GHG emissions, it should be even-handed in its application amongst primary users (tourism and freight) and amongst modes of transport;

j) that further work should be undertaken on establishing baselines and both absolute and efficiency-based performance metrics regarding GHG emissions from tourism

and its primary components (transport, by mode; accommodation type; activity, etc) globally and by destination.

2.7 UNWTO fully supports the efforts of ICAO Member States to find a way forward at the present Assembly Session on the application of emissions trading to international air transport. As for carbon offset, on which ICAO is initiating work, UNWTO sees this as one amongst a combination of measures which may assist in achieving the desired balance, if appropriately accounted, directed, validated and certified. A number of airlines, tour operators and travel agencies, as well as an increasing proliferation of third parties already offer tourists the carbon offset opportunity of purchasing items in support of local initiatives for introducing energy efficient or renewable energy projects, such as heat-saving stoves or lamps, electricity from methane or solar home heating, many in developing countries. Carbon offsets are generally a voluntary option for the tourist, but some tourism providers now include them in the price concerned. They are intended to apply to both business- and leisure-related tourism. A number of governments and businesses now include purchase of verified offsets as a mandatory component of travel policy.

2.8 Carbon dioxide (CO_2) is the primary GHG and is generally used as a relatively straightforward surrogate in offset programmes. Carbon offset has moved beyond provision of opportunity for philanthropic gesture to an international commodity market, with both benefits and downsides. The offset programmes currently on offer are by no means of equal value. The calculation and efficacy of offsets, and in particular the use of "future value accounting", has been brought into question. There is a wide variety of estimates of carbon produced and costs per unit of carbon on offer, and a wide variation in administrative overheads. There are also offset projects with uncertain outcomes, which have not been validated or which have demonstrably failed.

2.9 For these reasons various audit processes have been developed by non-governmental organizations for both projects and providers, and the United Kingdom is developing a Code of Practice regarding carbon offsets. ICAO is starting to develop methodology to enable precision in estimation of the volume of carbon to be offset, according to aircraft type, class of travel, route, etc, which will be an important tool in the evaluation process. ICAO subsequently intends to develop parameters for an air transport offset programme. UNWTO for its part is studying the application of carbon offsets in the tourism sector, which notably includes air transport, and believes there would be value in close cooperation on this between the two Organizations, along with others representing different transport modes, as well as UNEP and UNFCCC.

3. CONCLUSION

3.1 There is a continuing debate about how much aviation or tourism GHGs may contribute to climate change now or in the future, and the Fourth Assessment Report of the Intergovernmental Panel on Climate Change suggests that aviation's contribution may currently be somewhat smaller that previously estimated. But the industry should not hide behind statistics. Climate change is one of the

greatest challenges facing humanity today and every sector has a responsibility to mitigate its contribution. Air transport and tourism are perhaps unique in both contributing globally to the climate change problem and having an opportunity to contribute globally to its resolution. Air transport and tourism are inextricably linked and a systems approach on economic instruments, synchronized between ICAO and UNWTO, would help to optimize mitigation in the context of the benefits they produce for the economy at large and for poverty alleviation in particular.

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