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## Commission on Sustainable Development

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### Progress in the implementation of the Programme of Action for the Sustainable Development of Small Island Developing States

#### Report of the Secretary-General

#### Addendum

#### Sustainable development of air transport in small island developing States\*

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\* The present report was prepared by the International Civil Aviation Organization, in accordance with arrangements agreed to by the Inter-Agency Committee on Sustainable Development. It is an update of E/CN.17/1996/20/Add.5 and the result of consultation and information exchange between United Nations agencies, interested government agencies and a range of other institutions and individuals.

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## I. Introduction

1. The Programme of Action for the Sustainable Development of Small Island Developing States,<sup>1</sup> in chapter XII, groups air transport together with other transport modes (primarily shipping) and with communications. Insofar as they relate to air transport, the sections relating to action at the national, regional and international levels call for:

(a) Continued efforts to strengthen transport services and facilities at both the national and local levels, with particular attention to environmental protection, safety and innovative energy efficient and low-cost transport solutions;

(b) Fostering increased cooperation at the regional level, including exploring possibilities for the consolidation of national airline services;

(c) Improving access to financial and technical resources in support of regional organizations that are coordinating and advising small island developing States in the field of transport;

(d) Promoting research and development in transportation relevant to the sustainable development of small island developing States;

(e) Actions aimed at addressing quarantine problems at the national, regional and international levels.

2. Each of these actions is considered separately below, following the same format as the comprehensive report (progress achieved, success stories etc.).

3. The present report builds on the report submitted to the Commission at its fourth session, in 1996 (E/CN.17/1996/20/Add.5), which included background information on air transport that still remains relevant. In retrospect, more information could have been provided in 1996 on relevant developments concerning airports and route facilities, and the present report takes that into account. The present report also reiterates many of the recommendations made in 1996.

## II. Continued efforts to strengthen transport services and facilities at both the national and local levels, with particular attention to environmental protection, safety and innovative energy efficient and low-cost transport solutions

### Progress achieved

4. Extension works, modernization and enlargement of airports and air navigation facilities are a common feature in many small island developing States, especially in countries where tourism makes a substantial contribution to the economy.

### Success stories

5. Airport extension projects that have been completed during recent years or are under way include passenger terminal extensions in Antigua and Barbuda, Barbados, Mauritius, Micronesia (Pohnpei), Saint Kitts and Nevis (both islands), Saint Lucia (Castries) and Seychelles (Mahé); and new passenger terminals in Palau (Koror), Sao Tome, and Principe (Sao Tome), and Trinidad and Tobago (Port-of-Spain).

### Constraints/emerging problems

6. Low traffic volumes, especially in countries where tourism activities are not well developed, are an impediment to the financial viability of the provision of airport and air navigation services. Expectations from local governments that airports and air navigation services be self-supporting and no longer be a drain on public finance, as they have been until recently, are difficult to satisfy when revenues accrued from user charges are not sufficient due to low traffic volumes. In addition, lack of proper accounting and cost identification are major problems for achieving efficient cost recovery.

7. Low traffic volumes are also one of the principal reasons why there appears to be no significant progress in developing innovative energy efficient and low-cost transport solutions of direct relevance to small island developing States.

8. There are also significant financial constraints on efforts to strengthen airline services. Most small island developing States have a national airline or share in one (e.g., BWIA and LIAT in the Eastern Caribbean). However, the prohibitively high cost of modern airline equipment for most of their airlines (and indeed for Governments that may provide loan guarantees, for example) acts as a brake on market route development. Solutions lie in the areas of leasing rather than purchasing equipment, airline cooperation (including codesharing) and joint ventures.

9. For small island developing States with their limited resources, thin traffic routes and limited access to major markets, the future of air transport brings special problems and challenges. The trends of globalization, liberalization and privatization in air transport (as in all other economic activities) hamper their ability to participate effectively, in particular to maintain viable national airlines. In facing a competitive commercial and operating environment, difficult choices will need to be made and greater attention by these States to the value of cooperation should be a central tenet of their responses.

### **Priorities for the next five years**

10. In air transport, safety is of fundamental importance. Given the international nature of air transport, standardization is needed worldwide. States have achieved this through the creation of specifications known as International Standards and Recommended Practices (SARPs), as annexes to the Convention on International Civil Aviation. A standard is a specification, the uniform application of which is necessary for the safety or regularity of international civil air navigation, while a recommended practice is one agreed to be desirable but not essential. However, many small island developing States have not indicated their compliance with or differences from these provisions, as article 38 of the Convention requires. Consequently, the number one priority for these States should be to determine their positions on those provisions and to inform the International Civil Aviation Organization (ICAO) accordingly as soon as possible.

11. Small island developing States should also familiarize themselves with current technological developments of relevance to air transport, such as communications, navigation, surveillance/air traffic management (CNS/ATM) systems implementation and the ICAO flight safety programme, with a view to ensuring active participation on an individual or subregional basis in global programmes related to these developments. Small island developing States may obtain guidance from ICAO in the formulation of

projects, location of donors for the funding of such projects and implementation of projects.

12. Wherever possible, human resources development should be introduced in such areas as air traffic control, airport management, aviation security, flight operations and airworthiness, air transport regulation and air law.

13. Small island developing States should participate more actively in the ICAO statistics programme, which provides data on air transport that would be of value to those countries in their future planning. To that end, small island developing States should ensure that their international airlines file with ICAO their traffic reports, cost statistics and financial statements, as required by the Convention on International Civil Aviation (article 67).

### **Recommendations for the Commission's programme of work**

14. The Commission may wish to consider how funds could be raised to sponsor studies to investigate the feasibility of developing innovative energy efficient and low-cost transport solutions that would be of benefit to small island developing States.

## **III. Fostering increased cooperation at the regional level, including exploring possibilities for consolidation of national airline services**

### **Progress achieved/success stories**

15. Cooperation among groups of small island developing States is beginning to take shape at both the intergovernmental and airline levels. In the Pacific, broad cooperation on both fronts is being fostered from a political angle by the Pacific Forum (which also includes other States in its membership). However, airline cooperation is embryonic within this group of States, although there are a few instances of codesharing, joint leasing etc.; most codeshares are between island national airlines and nearby developed country airlines having intercontinental networks. In the Caribbean, a major initiative in 1996, promoted by the Caribbean Community (CARICOM), saw the adoption of a regional market access agreement to improve services and encourage airline investment within the region — the

Caribbean Community Air Services Agreement — which may be considered a success in that it is the culmination of long-standing objectives for cooperation among Caribbean States. However, whether or not the Agreement itself is a success can only be determined when it comes into force and its effects can be measured through actual market developments. In addition, there are the beginnings of airline cooperation between Air Jamaica and BWIA, although the nature of that cooperation remains limited. Again, most cooperation by the Caribbean carriers is with larger outside airlines.

16. With regard to the provision of air navigation services for upper or lower airspace, there are several examples of regional cooperation in the Caribbean due to the proximity of the different islands. The Piarco Flight Information Region based in Trinidad and Tobago is one of these successful examples. Within this framework, the use of ground positioning system satellite information for approach at airports is also contemplated. In the same region, other examples of cooperation can be found in a common civil aviation authority for the Organization of Eastern Caribbean States, which, among other activities, has a safety oversight programme, and in the field of aeronautical communications provided by Inter-Caribbean Aeronautical Communications. In the Pacific region, where the same type of cooperation also exists for flight information regions, plans are under way for a cooperative approach by Pacific Forum States in a unified air traffic management system for the whole Pacific airspace.

### **Constraints/emerging problems**

17. Insufficient political will to agree on and to implement cooperative ventures and the national wish to maintain a flag carrier are usually the main factors impeding efforts to increase cooperation. Furthermore, competition among islands (particularly in the Caribbean) as tourism destinations is generally at the expense of cooperation with regard to air services or among airlines.

18. Another major problem lies in the recovery of air navigation services charges. Airspace over small islands can be either very small, for example in the Caribbean, or on the contrary very large, for example in the Pacific or the Indian Ocean. But in both cases, the countries involved have difficulties recovering from users (i.e., air carriers) charges that they are entitled to collect for the provision of en route air navigation services. Solutions recommended by ICAO to address this problem include the creation of international cooperative ventures, such as international operating agencies or joint collecting agencies. The former are separate entities

that have been assigned the task of providing air navigation services within defined areas on behalf of sovereign States; they also are responsible for the operation of the charge collection system for the services provided. The latter are also very effective, although less encompassing, in the operation of multinational charges collection agencies. They have the advantage of saving countries the burden of considerable accounting work and of being much more efficient at a lower cost.

### **Priorities for the next five years**

19. There is a need for greater cooperation and collaboration among countries concerning the implementation of CNS/ATM systems, given the capacity of major CNS/ATM systems components and the high costs of their implementation and operation. A possibility would be to establish one-to-one relationships between developing countries and experts dealing with trials and demonstrations in developed countries. The development and provision of services by an external supplier who then departs leaving the country bereft of all technical knowledge is not acceptable.

### **Recommendations for the Commission's Programme of Work**

20. It is recommended that regional projects be formulated for the evaluation and creation of air transport master plans for the following three groupings of small island developing States: Caribbean small island developing States; Pacific small island developing States; and West African coast and Indian Ocean small island developing States. These projects would cover all the action items identified in the Programme of Action, and would seek to address the air transport challenges facing these groupings of small island developing States, such as, in order of priority:

(a) Ensuring compliance with SARPs and implementation of measures related to the ICAO flight safety programme;

(b) The availability of aviation management skills and of suitably trained manpower, and associated training requirements;

(c) The impact on small island developing States of technological changes taking place (CNS/ATM etc.);

(d) Difficulties experienced in obtaining funding for aviation projects;

(e) Problems associated with distance and isolation (such as relatively high transport costs, including both fuel and insurance);

(f) The impact on small island developing States of changes taking place in the economic regulation of air transport, including exploring the scope for more regional cooperation with regard to the regulatory aspects of air transport, such as joint negotiation of air transport agreements;

(g) The impact on small island developing States of commercial changes taking place in the air transport industry, including exploring the scope for greater cooperation (both commercial and technical) between airlines within the small island developing States grouping concerned and with other international airlines;

(h) Finding possible strategies for dealing with potential conflicts between small island developing States air transport policies and their tourism policies;

(i) The availability of reliable communications.

#### **IV. Improving access to financial and technical resources in support of regional organizations that are coordinating and advising small island developing States in the field of transport**

##### **Progress achieved**

21. The following are all important prerequisites for obtaining financing and successful cost recovery for air navigation services:

(a) Recognition of international cost recovery policy for air navigation services;

(b) Existence of an effective cost and revenue accounting system;

(c) A sound methodology for determining the cost basis for charges;

(d) An effective mechanism for the collection of charges.

22. The meeting of these prerequisites will be considerably facilitated where air navigation services are provided by means of organizational structures ensuring financing and operational autonomy. The trend towards such autonomy has been a principal factor in the improvement over recent years

in the financial situation of air navigation services and airports. In that respect, it must be noted that autonomy can take many forms and does not necessarily mean privatization since ownership can rest in public or private hands or a combination of both.

##### **Constraints**

23. Where autonomous bodies have not been introduced, the benefits that normally accrue with them, such as the introduction of corporate or commercial-type management as opposed to direct government administration, cannot be achieved and the burden placed on public finance remains heavy.

##### **Priorities for the next five years**

24. The financial strength of the various small island developing State entities in charge of providing air navigation services may differ, and so may the ability of each to secure financing as well as to negotiate favourable terms. On the other hand, air navigation services have an international or multinational dimension. There is no doubt that the backing of a collectivity of the States concerned would facilitate the obtaining by an international joint venture of financing at favourable terms. Such a grouping of forces would be particularly effective on a regional scale with regard to CNS/ATM systems implementation.

#### **V. Promoting research and development in transportation relevant to the sustainable development of small island developing States**

##### **Priorities for the next five years**

25. ICAO encourages States in their research and development effort. It is recognized, however, that in many small island developing States a lack of technical experience and adequate funding are reasons why such States find it difficult to participate in CNS/ATM research and development. However, it is acknowledged that although developed States do implement the necessary research and development, often in relation to their own needs, the flow-on benefits of the finished article to developing States are

immense. It is important that mechanisms exist to permit the transfer of knowledge to those States. The globalization of CNS/ATM dictates that small island developing States can play an effective part in the provision of safe and efficient air traffic services even though they may not participate fully in initial research and development projects. As small island developing States enter the twenty-first century, it is most important that they have an awareness of the progress of satellite utilization and other modes of technology, so that when they need to make the necessary changes to their own services, they are able to make informed decisions.

*Notes*

- <sup>1</sup> *Report of the Global Conference on the Sustainable Development of Small Island Developing States, Bridgetown, Barbados, 25 April–6 May 1994* (United Nations publication, Sales No. E.94.I.18 and corrigenda), chap. I, resolution 1, annex II.

## **VI. Actions aimed at addressing quarantine problems at the national, regional and international levels**

### **Priorities for the next five years**

26. Most small island developing States adopt “in quarantine” measures as defined by the World Health Organization to prevent the spread of disease — notably yellow fever — carried by reservoirs of disease or vectors of diseases. Some States also require the disinsecting of aircraft to ensure that this objective is achieved, and that the area within the airport perimeter be kept free of mosquito vectors of malaria and other diseases. However, very few small island developing States have indicated to ICAO their compliance with or differences from annex 9 (Facilitation) to the Convention on International Civil Aviation, which contains several provisions on the disinsecting of aircraft and quarantine measures, making it difficult to determine the extent to which health regulations are applied to air transport in those States. Consequently, a priority for small island developing States should be to determine their positions on those provisions and, as article 38 of the Convention requires, to inform ICAO accordingly.