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A STUDY OF AN ESSENTIAL SERVICE AND TOURISM DEVELOPMENT ROUTE SCHEME

1. INTRODUCTION

1.1 The assurance of "essential services" has generally been considered to be a major responsibility of States. Although there is no uniform definition of essential services, such services may be described as basic economic services of general interest, which are necessary for the efficient functioning of society. They consist of those which are indispensable to life and health (for example, water, electricity and gas supplies) and those which are vital for the assurance of social participation (for example, postal, telecommunication and transport services), with some variations reflecting different economic, social, political and cultural developments among States. The term "public service" is often used to describe an essential service in the energy, transport, and certain broadcasting sectors, while the term "universal service" is used in relation to the health, postal and telecommunication sectors.

1.2 The essential air service and essential tourism development route concepts

1.2.1 In the air transport sector, an essential air service (EAS) scheme exists in several jurisdictions where domestic or regional liberalization/deregulation has already taken place. It is a mechanism whereby support, in the form of a financial subsidy and/or an exclusive concession, can be provided to airlines for the provision of certain services of a public service nature, and/or for reasons such as social and economic development of remote regions or communities in the liberalized market environments. The mechanism enables support to be established on the basis of legislatively defined criteria as to eligibility for such support, and in accordance with a defined administrative process.

1.2.2 The issue of a domestically-developed EAS concept being applied in an international context was raised at the ICAO's fifth Worldwide Air Transport Conference (ATConf/5) in March 2003 [1], in connection with its discussions on sustainability [2] and participation. The Conference concluded that "States should consider the possibility of identifying and permitting assistance for essential services on specific routes of a public service nature in their air transport relationships". However, the Conference did not spell out how such a concept, aiming primarily at assurance of financially non-viable air services of a public or social service nature, might work in practice between States. There was also widespread support for a proposal by the World Tourism Organization (WTO-OMT) to undertake a study of the development and assistance to tourism routes to Least Developed Countries (LDCs) along the lines of an EAS concept, as a possible joint project with the WTO-OMT. This envisaged a variation on the EAS theme, namely an "Essential Tourism Development Route (ETDR)" concept.

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[1] See ICAO (2003), *Report of the Worldwide Air Transport Conference*, Doc 9819.

[2] Although many definitions have been given to the term "sustainability" with even more interpretations of these definitions, it is generally acknowledged that sustainability in the air transport context means business capability of an airline to create long-term shareholder value by exploiting economic, environmental and social market potential and development opportunities. Corporate survival is, therefore, a precondition and main concern for the airline. This is often not only related to and influenced by market conditions such as market size, location and propensity to travel, but also by the policy of the States concerned, *inter alia*, on economic development, environment, labor, tourism, social needs and national security. In the tourism context, the conceptual definition of sustainable tourism places emphasis on the balance between environmental, social and economic aspects of tourism, the need to implement sustainability principles in all segments of tourism, and refers to global aims such as poverty alleviation.

1.2.3 An ETDR concept focuses on the development of non-viable existing and potential international routes linking tourism-generating countries with LDCs. WTO-OMT takes the view that in a globalizing, liberalizing marketplace such international routes might be considered *de facto* equivalent to domestic and regional routes currently supported for assurance of service and social and economic development purposes. Promotion and implementation of an ETDR is a key element of a broad-ranging WTO-OMT programme entitled Sustainable Tourism - Eliminating Poverty (ST-EP)[3]. There has already been acknowledgement of the potential value of an ETDR concept by the European Commission, the New Partnership for Africa's Development (NEPAD), the United Nations Conference on Trade and Development (UNCTAD) and the World Economic Forum. Furthermore, collaboration has been established between WTO-OMT and "Routes" (the world route development forum) to promote network expansion for tourism in line with an ETDR concept.

1.2.4 Against this background, the ICAO Secretariat has undertaken this study on how existing EAS schemes have supported specific domestic and regional routes and how such approaches might be applied at States' discretion in an international context. Simultaneously and in cooperation with WTO-OMT, the study elaborates specifically on an ETDR concept with a view to its greater acceptance and application. Although these concepts have a slightly different origin and emphasis, they have greater similarity in terms of general objectives; and thus the modalities for implementing them, as devised, may often be common. The study, therefore, seeks to develop a new international regulatory scheme to apply both EAS and ETDR concepts under a single umbrella, which will be called an "Essential Service and Tourism Development Route (ESTDR)" scheme. The study, however, does not address the economic impact of an EAS route or ETDR quantitatively[4], which will vary from case to case. Rather, it focuses on a step-by-step analytical approach to the construction and implementation of an ESTDR scheme.

1.3 **Structure of the study**

1.3.1 The study consists of six sections as well as three appendices. The next section looks at basic concepts and issues associated with EAS and ETDR, while the third section outlines existing EAS schemes. The fourth section examines a number of key elements in constructing a new ESTDR scheme, i.e. route selection, service level specification, carrier selection, contractual arrangements, subsidy payments, sources of financing, and supplementary measures. The fifth section discusses regulatory arrangements including a possible model clause under an air services agreement for an efficient implementation of an ESTDR scheme. The final section contains concluding remarks. The appendices of the study include a table showing passenger traffic links to/from LDCs, a comparison table describing existing EAS schemes in greater detail, and a flow chart summarizing the step-by-step approach in the fourth section.

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[3] ST-EP was initiated by WTO-OMT during the World Summit for Sustainable Development in Johannesburg in 2002. In pursuit of the United Nation's Millennium Development Goals (MDGs, especially the first goal regarding poverty alleviation) and the "Development Summits" of Doha (Trade), Monterrey (Debt Financing) as well as Johannesburg (Sustainability), ST-EP aims at the creative development of sustainable tourism in a way which contributes to eliminating poverty. Launched in collaboration with UNCTAD, ST-EP is being extended to other partners as it evolves. Further information on ST-EP may be found on http://www.world-tourism.org/step/menu.html.

[4] Quantitative analyses of the overall economic contribution of airline and tourism industries have been conducted separately by ICAO, WTO-OMT and other governmental agencies. See, for example, ICAO (2004), *Economic Contribution of Civil Aviation*, Circ. 292; WTO-OMT (2001), *Tourism Satellite Account: Recommended Methodological Framework*; Aviation & Travel Consultancy (2003, 2004), *An Expanded Air Services Network for the Highlands and Islands*, prepared for Highlands and Islands Strategic Transport Partnership (HITRANS, http://www.hitrans.org.uk/downloads.php); U.K. Civil Aviation Authority (1994), *The Economic Impact of New Air Services: A Study of New Long Haul Services at UK Regional Airports*, CAP 638; and Wheatcroft, Stephen (1994), *Aviation and Tourism Policies: Balancing the Benefits*, prepared for WTO-OMT, Routledge.

2. CONCEPTS AND ISSUES

2.1 In this study, the term "**essential air service (EAS)**" is defined as a passenger air service of a public or social service nature, which a State may consider needs to be provided and where the market may not have sufficient incentive to do so. The term "**Essential Tourism Development Route (ETDR)**" is a concept developed by WTO-OMT focussing on international routes between specified tourism-generating markets and tourism-receiving markets in LDCs in particular, where an adequate level of passenger air service is not (fully) supplied, or is at risk, under existing market and regulatory arrangements. These two concepts are based on principles regarding existing EAS schemes pioneered in liberalized markets. The term "**Essential Service and Tourism Development Route (ESTDR)**" scheme is a proposed international regulatory scheme developed from both EAS and ESTDR concepts and drawing them together under a single umbrella. Air cargo services are outside the scope of this study, but most of the essential parameters associated with a passenger air service could also be applicable to an air cargo service. This section outlines the basic objectives of EAS and ETDR, the feasibility and desirability of State assistance for assurance of services, and issues associated with the application of a domestically-developed EAS scheme internationally and the elaboration of an ETDR concept.

2.2 Objectives

2.2.1 EAS and ETDR share the following two inter-related objectives, although ETDR emphasizes more the second objective. The first objective is, in a narrow sense, to assure lifeline provisions of air services for remote or peripheral destinations of the world irrespective of the profitability of individual operations, especially in a situation of transition to liberalization or in an already-liberalized market. In a broader sense, this objective may incorporate other social and political elements such as keeping international links to major destinations, mainly for LDCs, Small Island Developing States (SIDS) and Landlocked Developing Countries (LLDCs), and maintaining cultural contacts with concentrations of their overseas populations.

2.2.2 Since many air services to remote or peripheral destinations may not be commercially viable, mainly due to a very low traffic volume, they would not be provided by the market in the absence of government intervention. The result here is that choice may be limited or non-existent. Theoretically, if such air services could be supported by the State concerned in an efficient way, welfare (economic and social benefits) would be maximized with the continued provision of an adequate level of services. An additional dimension is that in several instances the responsible authorities have clearly recognized the socio-political value of such initiatives both in terms of public satisfaction (for example, the Greek, Spanish and the U.K. Island services) or the need to secure "widespread buy in" to a liberalization initiative (for example, the U.S. domestic deregulation and the liberalization packages in the European Union).

2.2.3 The second objective is to facilitate and even drive economic development, primarily through stimulating inward tourism and investments. Tourism is increasingly being recognized by the international community and its institutions as a focal instrument for development, with special emphasis on the capacity of the sector to assist poverty alleviation. Tourism creates job opportunities; creates and can help spread wealth; and can help diversify the economy, especially in remote areas which attract tourists for their cultural, wildlife and landscape values. For many LDCs, in particular, tourism is often, or has the potential to be, their major export and offers one common comparative advantage that these States share in the services-dominated global marketplace. In rationalizing development support for the tourism sector, LDCs should identify tourism as a major plank of their Millennium Development Goal (MDG), Poverty Reduction Strategy Paper (PRSP) or Country Assistance Strategy (CAS) achievement plans. These are all strategies for individual States developed by international agencies[5]. In this way, the need, commitment and follow-through on tourism would be tied into its broad poverty reduction plans.

2.2.4 Without reliable attractive air services and harmonized aviation and tourism policies[6], however, the benefits of tourism for these countries simply cannot be realized or are constrained at best. In many LDCs, air transport systems continue to be vulnerable due to cumulative structural impediments such as high operating costs, low demand, inadequate infrastructures and resource limitations. As shown in Appendix A, international air services between LDCs and tourism-generating countries (developed countries and some developing countries with high international tourism expenditures), most of which are medium- and long-haul operations, continue to be on a very limited scale. Among routes that are not presently operated, or which are under-served, there may be ones that are potentially viable given appropriate support, with substantial spin-off benefits which are not currently being realized and which would ultimately more than warrant the support provided. Such support need not be seen as permanent — it may be sufficient to "kick start" services, which could become viable once the market recognition and supply-side support mechanisms have been created.

2.2.5 Those development synergies are also the case for other developing countries and even for developed countries. For example, States which have tourism as the mainstay of their economy might consider it indispensable to ensure reliable air services; otherwise, the potential uncertainty about continuation of services might have a negative effect on a travel industry's inward investment and the opportunity for inbound tourism, and thus the actual loss of a service could have a much greater cost. Furthermore, the changing operating environment after the events of 11 September 2001 (significant increases in jet fuel, insurance and security-related costs) are often making the initiation of new air services prohibitive for many smaller, mostly developing countries', airlines. Therefore, more international air services linking specific areas to the wider global economy, or for tourism and economic development purposes, may be viewed by more States as justifying the use of EAS and ETDR.

2.3 Aviation support issues

2.3.1 Both EAS and ETDR concepts are premised upon external support to airlines (and other partners such as tour operators in the case of support for non-scheduled air services) for achievement of an adequate level of international air service on specific routes. If economic and social benefits from air services (including their spin-off benefits) that cannot be captured solely by the profit motives of airlines are significant, then it may be reasonable for States to seek to support the service, in a way that would not distort the normal working of the market. ICAO's policy position on State aids/subsidies, as set out by ATConf/5, is that "in a situation of transition to liberalization or even in an already-liberalized market, States may wish to continue providing some form of assistance to their airlines in order to ensure sustainability of the air transport industry and to address their legitimate concerns relating to assurance of services. However, States should bear in mind that provision of State aids/subsidies which confer benefits on national air carriers but are not available to competitors in the same market may distort trade in international air services and may constitute unfair competitive practices."

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5 See the Web sites of the United Nations (http://www.un.org/millenniumgoals/), the International Monetary Fund (IMF, http://www.imf.org/external/np/prsp/prsp.asp) and the World Bank (http://www.worldbank.org/cas/), respectively.

6 The synergies between aviation and tourism developments may be undermined by the conflicts of policies in the two fields, for example, between the protection of the national airline's interests and the promotion of inbound tourism development. See Wheatcroft (1994, *ibid*).

2.3.2 In the domestic and regional context, EAS schemes are already established in several States for assurance of service and social and economic development purposes, but there are still differences in the ways in which non-commercially viable air services are funded. As described below, airlines have traditionally received three types of subsidies, which may affect market structure, conduct and performance differently.

2.3.3 **Generic direct subsidy**. The most widely-used State assistance has been an across-the-board subsidy for airlines *per se* in a monetary form to fill the gap between individual airlines' commercial revenues and their expenditures, including a fair rate-of-return on their invested capital, or actual operating losses incurred. This is because many States have regarded the survival of their own national airlines, *inter alia,* as a definite means of providing an effective assurance of both domestic and international air services, and thus have felt a special need to underwrite the sustainability of their airlines in the exercise of their responsibilities relating to assurance of services. Developing countries, in particular, have also been concerned about over-dependence on foreign airlines to provide international air services, especially in bad times when the services may be adversely affected. In the case of State-owned airlines, generic direct subsidies have been considered as partial or full compensation for costs imposed on the airline by government actions that have social and political purposes. When providing such subsidies, governments usually expect to be able to influence the airlines' managerial decisions and to impose obligations, which are often non-remunerative, on their airlines (for example, provision of lifeline air services to remote regions has been a part of a mandate of many national airlines). That is, political backing and support from the State is granted in return for certain public service obligations from the airlines.

2.3.4 However, generic direct subsidies on the basis of their financial needs as a whole may not provide airlines with strong incentives to promote efficiency and may sometimes involve weak control over the direction of any assistance provided. It is widely recognized that such subsidies may have the potential to affect trade in air services and to distort competition, and could lead to anti-competitive behaviours such as capacity dumping and predatory pricing. To minimize adverse repercussions, several States (and groups of States) have developed rules on State aids/subsidies, which set out criteria to meet very specific objectives (such as restructuring finances of airlines) only where better alternatives are unavailable. Moreover, an increasing number of States are recognizing that generic direct subsidies to preserve national airlines while saving some jobs and generating economic activity in the aviation sector might have more detrimental consequences in terms of lost opportunities in the tourism sector with its significant economic multiplier effect[7].

2.3.5 **Indirect subsidy**. There is also an indirect way of subsidization, which has been often used by States and local governments either as a part of a comprehensive aid package or as a measure supplementary to a direct subsidy for the opening of new routes or new frequencies. This usually takes a form of the provision of service inputs for specific local operations of airlines at no cost or at preferential rates. Discounts or exemptions on charges for airport services, navigation aids and weather information, and airport facilities at rates not covering costs are a few examples of such indirect subsidies. The investment support to local regional airports, most of which are under-served airports, is also a common practice to encourage airlines to introduce new routes through the reduction in costs of landing charges. Another indirect way is to provide a subsidy to the tourism sector. This includes a wide range of export incentives and concessions to attract foreign tourists and inward investors (for example, duty-free exemptions for certain

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[7] See Wheatcroft (1994, *ibid*), suggesting that for every job saved in protecting a national airline, as many as four job opportunities may be lost through missed tourism business across the economy.

tourism inputs, tax holidays etc). Although a subsidy for tourism functions much less as assurance of services than as instruments in economic development policy, strong synergies between aviation and tourism developments could serve to turn the loss-making routes into being self-sustainable.

2.3.6 While indirect subsidies might be of substantially increased strategic importance for States (as well as their regions and airports) looking for measures to attract air services, they would entail a potential negative impact on the conditions of competition and trade *per se*. For example, the provision of indirect subsidies by one State could potentially create a subsidy race, as each State seeks to outbid its neighbouring rivals. This might also encourage small recipient airlines to over-expand. Indeed, the scale of such negative impacts pertaining to indirect subsidies, while difficult to measure, may be limited in comparison with those pertinent to generic direct subsidies. Nevertheless, the provision of indirect subsidies needs careful consideration to avoid unfair treatment of some airlines and to meet the requirements of non-discrimination, time-limitation and transparency, and with regard to airport and similar charges, principles set out in Article 15 of the Chicago Convention[8].

2.3.7 **Implicit subsidy**. In addition to providing direct and indirect subsidies, States have often required their national airlines to exercise cross-subsidization across the route network to sustain loss-making domestic routes. In situations where there is strict regulation of market entry/exit and of tariffs, some States require airlines that wish to serve the major airports (trunk routes) to provide a pegged level of services between the major airports and the smaller airports, and sometimes also to provide a certain level of services between the smaller airports themselves. The air fares on domestic trunk routes are established so as to generate additional revenues that are used to help cover the cost of serving the domestic regional routes. This often takes the form of setting identical prices both on trunk and regional routes even though the cost of supplying the service differs in these markets. To maintain the flow of profits, the practice of entering only the trunk routes (so-called “cream-skimming”) by competitors is prohibited, often resulting in a single airline or duopoly policy on domestic routes. In some States, cross-subsidization has also occurred not only among domestic routes but also among international routes and between international and domestic routes. At the international level, bilateral air services agreements have, in effect, provided a non-monetary form of assistance to national airlines by limiting the scope of competition, thereby enabling cross-subsidization.

2.3.8 Cross-subsidization might be considered to be an implicit subsidy for operations on unprofitable routes and a means to redistribute wealth between different regions, but the internal process of cross-subsidization is neither transparent nor likely to stimulate efficiency in terms of airlines’ profit maximization. It also affects an airline’s capital stock formation negatively. This is because, as internal financing to support unprofitable routes decreases profits, an airline has to offer a higher return to its investors in order to maintain their commitment to invest. This increases its cost of capital and thus reduces the amount of investment and capital formation. Furthermore, cross-subsidization is often made unworkable by market forces and is not compatible with efficiency and the increasingly competitive environment. Liberalization of air transport by domestic regulatory reforms and liberal air services agreements concluded in recent years has already substantially reduced or eliminated the opportunities for cross-subsidization in many markets.

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[8] See ICAO (2004), *ICAO’s Policies on Charges for Airports and Air Navigation Services*, 7th edition, Doc 9082/7 (http://www.icao.int/icaonet/dcs/9082_7ed_en.pdf), and ICAO (forthcoming), *Airport Economics Manual*, 2nd edition, Doc 9562/2.

2.4 **Application of existing EAS schemes**

2.4.1 Considering both the costs and benefits of traditional subsidies and liberalization developments at the international level, the most pragmatic and efficient approach to construct an ESTDR scheme, which can be used for EAS and/or ETDR, might be to apply the modalities of existing EAS schemes internationally. As shown in the next section, existing domestic- and regional-level EAS schemes are mechanisms to provide a targeted direct financial subsidy and/or market protection on a route basis. They have been working as a device to assure a minimum level of air services on specific "thin" routes of a public service nature in a situation of transition to liberalization or in an already-liberalized market, replacing support being given to airlines on the basis of their financial needs as a whole or implicitly through cross-subsidization. Such targeted support would have fewer implications of subverting the outcomes of liberalization with a more flexible, transparent and market-oriented supporting process. Evidence from air transport and other sectors in several developed countries indicates that targeted direct subsidies aimed at meeting particular needs of individual communities have marked advantages in terms of keeping the costs of subsidies low, guaranteeing continued minimum level of lifeline services, and ensuring that local service requirements are met[9]. The international application of existing EAS schemes to construct an ESTDR scheme, therefore, might be compatible with the liberalization trend and least likely to distort trade and competition, if properly designed.

2.4.2 An ESTDR scheme should be consistent with the ICAO's ATConf/5 conclusion that "... States should take transparent and effective measures accompanied by clear criteria and methodology to ensure that aids/subsidies do not adversely impact on competition in the marketplace", even where State assistance can produce economic and/or social benefits in terms of assurance of services. This Conference conclusion, together with other major principles governing existing EAS schemes, would require that the entire mechanism and process of an ESTDR scheme be transparent, accountable, non-discriminatory, sufficiently flexible and, as far as possible, market-oriented to minimize the market distortion.

2.4.3 In addition, an ESTDR scheme has two suppositions by its very nature. First, as long as an ESTDR scheme is designed based on existing domestic- and regional-level EAS schemes, its application would presuppose the existence of, or the transitional process to, a liberalized international market. In exceptional cases, the scheme could be applied also to non-liberalized routes having untapped tourism potential. However, the use of the scheme for non-liberalized routes should be a last resort, because traditional-type air services agreements already provide implicit assistance to operations on such routes by limiting the scope of competition.

2.4.4 A second supposition is that application of an ESTDR scheme should be on the basis of the route concerned and not the airline, and would not favour, or be perceived as

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[9] See, for example, Australian Bureau of Transport and Regional Economics (2003), *Regional Public Transport in Australia: Economic Regulation and Assistance Measures*, Working Paper 54 (http://www.btre.gov.au/docs/workingpapers/wp54/wp54.pdf); Cranfield University Air Transport Group (2002), *Public Service Obligations in Europe: A Comparative Study*, prepared for HITRANS (http://www.hie.co.uk/HIE-cranfield-pso-report(small).pdf); DKM Economic Consultants Ltd (2003), *Review of Air Services Supported by the Essential Air Services Programme*, prepared for Irish Department for Transport (http://www.transport.ie/upload/ general/4803-0.pdf); The Government of Norway (2003), "Operating Subsidized Regional Routes in a Liberalized Market as Exemplified by the Norwegian Experience" in *European Experience of Air Transport Liberalization*, ATConf/5-WP/61 (http://www.icao.int/icao/en/atb/ecp/CaseStudies/Norway_En.pdf); U.K. Civil Aviation Authority (2005), *UK Regional Air Services: A Study by the Civil Aviation Authority*, CAP754 (http://www.caa.co.uk/docs/33/ CAP754.PDF); U.S. General Accounting Office (2000), *Essential Air Service: Changes in Subsidy Levels, Air Carrier Costs, and Passenger Traffic*, GAO/RECD-00-34 (http://www.gao.gov/archive/2000/rc00185t.pdf); and U.S. General Accounting Office (2002), *Options to Enhance the Long-term Viability of the Essential Air Service Program*, GAO-02-997R (http://www.gao.gov/new.items/d02997r.pdf).

favouring, one airline/State over another. This is because an ESTDR scheme is a safeguard exclusively for assurance of air services on particular *routes* of a public service nature as well as an instrument solely for tourism *route* development primarily at a start-up stage. In this sense, an ESTDR scheme would be neither a preferential measure nor a participation measure[10], both of which are designed to provide less competitive airlines with an unreciprocated right or preparation time to enable them to develop a service that cannot be contested fully by competitors in a certain period.

2.4.5 At issue is how and to what extent the mechanism used in domestic and regional contexts could be applied to broader international air services, given that most elements adopted by existing EAS schemes are transferrable to the international environment. Without doubt, there are a number of practical, analytical and technical questions to be answered in order to effectively design and implement an ESTDR scheme. For example, what kinds of international routes or circumstances should qualify for ESTDR consideration? What kinds of institutional arrangements could be used to achieve an efficient outcome and to mitigate the potential negative effects pertinent to State support? How can States ensure enough financial resources for such subsidies? When seeking assurance of service, what other regulatory options exist? How should the bilateral/regional regimes in international air transport deal with an ESTDR scheme? These questions as well as other issues will be discussed in the fourth and fifth sections of this study.

3. EXISTING ESSENTIAL AIR SERVICE SCHEMES

3.1 Existing EAS schemes, most of which are applied to domestic air services, differ in their specific objectives and mechanisms. They have in common, however, a number of features: they are aimed at linking small communities with larger ones; involve support for the operation of services or routes, rather than to the airline *per se*; the support generally comes from central budgetary allocations; the mechanism involves a transparent public competitive tender or application process for carrier selection; the provision of subsidies, the concession or licence granted is contractual and time-limited; and, the regulatory elements may cover frequency, capacity, levels and conditions of air fares, and standard of service. This section of the study provides a brief overview of the principal existing EAS schemes in Australia, the European Union (EU), and the United States, as well as other States. A more detailed explanation of each scheme and the sources of information are presented in Appendix B.

3.2 Australia

3.2.1 The Australian Federal Government has been subsidizing remote air services since 1957, most recently through the Remote Air Service Subsidy (RASS) scheme established in 1983. The objective of the RASS scheme is to ensure communities in remote and isolated areas have access to scheduled air services for the carriage of passengers and goods. Communities willing to receive RASS services must meet two fundamental requirements: a demonstrated need for a weekly air service, and being sufficiently remote in terms of surface travel time. An airline providing RASS services is selected through a competitive open tender process based, *inter alia*, on the operator's safety qualification, operation policy, business plan, budget, financial viability and operation ability. The contract term does not normally exceed two years with an option to

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[10] Preferential measures are non-reciprocal regulatory arrangements, which States in a regulatory relationship agree are needed by a developing country for its effective and sustained participation in international air transport. Participation measures are available to all States and used to build confidence in progressively moving to a less restrictive regime and to ensure that the results of increasing competition do not become too unequal. See ICAO (1999), *Policy and Guidance Material on the Economic Regulation of International Air Transport*, 2nd edition, Doc 9587.

extend for up to two more years. The RASS scheme currently provides a total of A$3.3 million subsidies for eight airlines serving about 250 communities annually. In addition, the State Governments of Queensland and South Australia each subsidizes regional airlines serving specific remote routes. Australia Post also has its own subsidy program (total about A$0.35 million).

3.3 European Union

3.3.1 The Public Service Obligation (PSO) scheme was introduced at the EU level by the Second Liberalization Package in 1990 and enhanced by the Third Liberalization Package in 1993. Under this scheme, which covers both domestic and intra-EU international routes[11], a member State can impose a PSO to ensure the adequate provision of scheduled air services to a peripheral or development region or on a thin route to any regional airport that is considered vital for the economic development but is not commercially viable. Once a PSO has been imposed, airlines can operate the route only if they meet the service requirements. If no airline is interested in operating the route, then the route can be restricted to one airline for up to three years. The operator shall be selected from Community air carriers (airlines with a valid operating licence granted by an EU member State) by public tender, taking into account the adequacy of the service including air fares and, if any, the cost of the compensation required. There are now over 130 PSO routes, but not all of them with subsidies, some having market protection only.

3.3.2 There are also several other regional schemes outside the PSO in the form of a public-private partnership (PPP) between local governments and private businesses. For example, Route Development Funds (RDFs) were established in Scotland in 2002 and Northern Ireland in 2003 with the budgets of GBP 6.8 million and GBP 4 million, respectively, spread over three years. In 2004, the Northwest region of England also established an RDF, while Wales and other regions in the United Kingdom have shown an interest. The aim of RDFs is to promote the development of new routes through the provision of investment support for local airports to reduce landing charges for airlines selected and for new routes. The targeted routes are primarily to Continental Europe, but in some cases also to intercontinental destinations such as the United States and the United Arab Emirates.

3.4 United States

3.4.1 The Essential Air Service (EAS) program was established in 1978 to ensure that no communities would lose air service as a result of the Airline Deregulation Act. The Department of Transportation (DOT) determines both eligible communities (such as over 70 driving miles from a large or medium hub airport) and required service levels (a connecting hub airport, frequency, capacity etc.) for each community. If the last airline serving a community, either with or without a subsidy, wishes to terminate, suspend, or reduce that service below the required level, it must file a 90-day advance notice. Any airline may propose to replace the incumbent on a subsidy-free basis during the notice period. If no airline is willing to serve on a subsidy-free basis, the DOT solicits proposals for subsidized service. The selection criteria include the preference of the community, the applicant's marketing relationship with major airlines, experience in providing scheduled air service, financial stability, and requested subsidy

[11] In May 2003, the European Commission issued a consultation paper with a view to revision of Regulations forming the Third Liberalization Package, which included a proposal for the potential application of a PSO scheme to routes to third countries. While WTO-OMT supported strongly this initiative, the majority of respondents expressed a negative opinion on this proposal. The issue remains under consideration by the Commission. See http://europa.eu.int/comm/transport/air/rules/package_3_en.htm.

amounts. The contract normally has a two-year period. At present, subsidies of over $100 million are provided annually to airlines serving about 140 communities (35 of which are in Alaska).

3.4.2 In addition to the EAS program, the Small Community Air Service Development Program was introduced in 2000. This program has granted a total of about $20 million to a maximum of 40 communities served by an airport that is not larger than a small hub airport with insufficient air services or unreasonably high air fares. Priority is given to those communities, *inter alia*, where a portion of the cost of the activity is assumed by local non-airport-revenue sources, and where a PPP has been or will be established. Grant funds can be used, for example, for financial incentives (including subsidies and revenue guarantees) to airlines and to cover the expense of new promotional activities related to improving air services.

3.5 Other States

3.5.1 Some other States also have direct subsidy schemes to support lifeline air services to remote regions. For example, in Canada, a Federal Government's direct subsidy programme based on competitive bids had been established in accordance with the National Transportation Law of 1988 to support the existing services to isolated and remote communities in Northern Canada (the "designated area"). After abolishment of the "designated area" in 1996, a different program was instituted on a provincial basis in Quebec, and is still in existence with some changes. In the Western African region, member States of the West African Economic and Monetary Union (WAEMU) adopted in 2002 a liberalization package of the common air transport program within the region, including a PSO scheme similar to the EU's scheme. Also, several small island States and dependencies in the Caribbean and Pacific whose economies are heavily dependent on tourism have provided financial assistance (such as direct subsidies for the operation on the route and the purchase of a specified number of seats) to airlines including foreign airlines to keep their traffic links to tourism-generating developed economies.

3.5.2 In addition, several other schemes are in the pipeline. In 2003, an Indian governmental committee proposed the establishment of an essential air services fund (EASF) to preserve essential but uneconomical domestic air services, which are currently supported by cross-subsidization in accordance with a route dispersal guideline. Member States of Pacific Islands Forum have also been discussing the mechanisms to support essential international air services under the Pacific Islands Air Services Agreement (PIASA).

4. DESIGNING AN ESTDR SCHEME

4.1 Despite the greater transferability of the modalities of existing EAS schemes to the international environment, some modification, addition and expansion of essential parameters would be required in constructing an ESTDR scheme. One of the regulatory challenges is how to incorporate market-oriented means into the scheme, thereby mitigating potential negative impacts on the marketplace and enhancing airlines' efficiency incentives. Flexibility should also be a watchword throughout the design process, which is likely to vary from case to case, given the complexity of the ever-changing international operating environment. Bearing these in mind, this section constructs the basic mechanism of an ESTDR scheme through a step-by-step analysis of the benefits, costs and risks around seven critical pillars: the selection of eligible routes, the specification of adequate service levels, the institutional mechanisms for the carrier selection, the contractual duration arrangements for the post-selection stage, the payment method and calculation of subsidies, the source of financing, and optional, supplementary measures. Appendix C sets out a summary of the discussion in this section in the form of a flow chart.

4.2 Route selection

4.2.1 If an ESTDR scheme is designed based on an EAS concept, any country-pair including both developing and developed countries would have an equal qualification to be considered as a potential market of the application. If an ETDR concept is a founding basis of the scheme, destination States would normally be the States defined by the United Nations as LDCs. Even in the latter case, however, the application to other States would not be ruled out should the governments of both the originating and receiving markets concerned judge that this is warranted. Irrespective of the adopting concepts, country-pairs should be narrowed down to the route level (or a group of routes) to examine the eligibility.

4.2.2 In identifying and selecting eligible routes, there are different approaches. One approach is that a State selects an eligible point or points in its territory, allowing airlines to propose the routes that link those eligible points with a point or points in the territory of other State(s). Under this approach, the selection of the end-point(s) in the other State's territory is made by each eligible airline (the eligibility of airlines is discussed in paragraph 4.4) based on its commercial and operational considerations and in accordance with the pre-defined guidelines (for example, the size of the airports in the other States and the number of intermediate stops). Another approach is that a State simply selects the eligible origin-destination route linking a point in its territory with a point in the territory of other State(s).

4.2.3 While the route selection criteria are likely to vary widely between States, the ESTDR application should be solidly based on socio-economic objectives and economic justification. Practically, the following two-stage test could serve to distinguish a primary candidate for the ESTDR application. The first stage of the test would examine whether there is a demonstrated need, which would predicate the necessity of the ESTDR application, for an "adequate" level of international air service (the definition of an "adequate" level is discussed in paragraph 4.3) on each candidate route. Such needs may include but not be limited to assuring lifeline provisions, supporting vital economic sectors, keeping international links to major commercial and political destinations, and maintaining cultural contacts with concentrations of their overseas populations. While "thin" routes serving "remote or peripheral areas" could normally be selected in light of assurance of lifeline provisions in accordance with an EAS concept, more strategic priority would be placed on routes serving "development areas" for tourism in the context of an ETDR concept. Support for routes serving "development areas" might be rationalized on grounds of economic development through tourism growth, especially during their initial phase of development.

4.2.4 The key issue here is to define what is "thin", a "remote or peripheral area" or a "development area" for the purpose of this scheme. On the one hand, a narrow definition and interpretation of the terms would keep intervention in the market to a minimum (and thus minimize inefficiency created by regulatory assistance) but have a risk of reduction in accessibility to lifeline services as well as tourism-generating points. A broadened definition, on the other hand, would guarantee a minimum level of services on more routes or points but could raise competition concerns and lead to inefficiency. Taking those trade-offs into consideration, States would have to develop their own measurable definitions for these terms, which should provide a clear and objective means of judging which route is a preliminary candidate for the ESTDR application. For example, the term "remote" could mean beyond X-hour surface travel to a main population centre with an international airport; and an airport could be considered as serving a "development area" if its catchment includes an area in receipt of tourism development funding. However, also to be taken into consideration in this context is the fact that for many LDCs only one international airport exists.

4.2.5 The second stage of the test would be an economic assessment based on demand for air services and airlines' operating cost conditions. From an economic analysis viewpoint, a candidate route should be commercially unviable due to the very limited demand and/or to the exceptionally high cost caused by external factors that airlines cannot control. For example, the demand conditions at remote areas that are characterized by small populations, peripheral distant location, harsh climate, and lower income per capita would be unlikely to generate a sufficient number of passengers to sustain scheduled air services with the frequency of service needed and appropriate aircraft types. Similarly, operational and infrastructure limitations that require the use of smaller aircraft and hinder higher aircraft utilization could push costs up to the level that makes it impossible to inaugurate new services to remote destinations. On such routes, any airline may not be able to cover its operating costs no matter what level of air fare it charged, and in many instances even if it offers a range of different levels of air fares.

4.2.6 In addition to non-commercially viable routes, some States may wish to extend the scope of an ESTDR scheme to "sustainable natural monopoly" routes. A natural monopoly, in economic terms, refers to a market structure wherein a single airline could provide all the services at a lower cost than could two or more airlines, and the only way in which the monopoly airline could cover its cost is to price above the most efficient level, i.e. marginal cost (the increase in cost that results from offering one more unit of the service)[12]. If the route in question has the character of a sustainable natural monopoly, mainly because of low demand and high fixed costs, then restricting entry would provide for the possibility that industry costs would be minimized. The imposition of entry controls needs to be complemented with price controls. Otherwise, the airline might set a monopoly price, and consumers on low incomes or those living in areas where infrastructure provision is expensive are likely to find themselves unable to afford access to air services. The inclusion of sustainable natural monopoly routes on grounds solely of air fare levels and structures (in terms of unreasonably discriminatory, unduly high or restrictive prices), however, should only be undertaken with great caution, because it might open up huge numbers of routes for potential consideration. Moreover, the goal of an ESTDR scheme should be to support increased liberalization, not to sustain monopoly situations.

4.2.7 Even if each existing or potential route is viewed as non-commercially viable or a sustainable natural monopoly at a single origin and destination city-pair level, an airline (or airlines) could operate some of those routes commercially and even competitively by rearranging the network from point-to-point to one through a hub (a single or double connection). Since the hub-and-spoke network generates economies of scale in terms of traffic density and economies of scope, there may be merit in combined routes for more than one origin and/or destination in order to achieve viable volume for efficient air services on a "thin" route. For example, if three originating markets "A", "B" and "C" in a particular region are concerned with regard to receiving market "E", an airline may be able to consolidate traffic through a fourth market, "D" (which may well also be an originating market and perhaps a hub for the airline concerned). In this way, traffic might be carried from "A", "B" and "C" to "D" on existing services, with new or expanded direct service only being required from "D" to "E". In such a case, a set of routes rather than a single route would be a suitable unit for the consideration of the ESTDR application.

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[12] A sustainable natural monopoly situation should not be confused with a non-commercially viable situation. In strict economic terms, a natural monopoly occurs when a *market* demand curve intersects a long-run average cost curve in the region of economies of scale (i.e. downward-sloping region). Natural monopoly is said to be sustainable if market forces would result in the survival of only one airline. This occurs when the *residual* demand curve facing a potential entrant lies everywhere below a long-run average cost curve. By contrast, a non-commercially viable situation occurs when a *market* demand curve lies everywhere well below a long-run average cost curve, thus rendering any operation unprofitable. A natural monopoly is referred to as one of "market failures" in the market economy, but a non-commercially viable situation is not a market failure because there is no existing market to begin with.

4.3 **Service level specification**

4.3.1 One of the difficult tasks in designing an ESTDR scheme is to define an adequate level and standard of air service (usually in terms of frequency and capacity and, if necessary, aircraft type, routing, air fares, schedule, connectivity etc.) on each eligible route or at each eligible point. The specification of the adequacy, in turn, affects the route selection discussed in paragraph 4.2 above. In general, scheduled air services would be a main focus in considering adequacy because of their nature of continuity and regularity. Non-scheduled air services that are open to the general public could also be considered being adequate on tourism-oriented routes when the scheme stems from an ETDR concept. On such routes, demand is price-sensitive and highly seasonal, and it may be difficult to sustain scheduled air services in economic downturns.

4.3.2 The criteria for the determination of adequacy may have regard to: the particular needs for air services and tourism; the demonstrated level of traffic demand; the extent to which the demand may be accommodated by connecting air services (including services of airlines exercising Sixth Freedom traffic rights) and by third country airlines (exercising Fifth or Seventh Freedom traffic rights)[13]; the availability of non-scheduled operators and other transport modes; air fares and conditions which can be quoted to users; and the combined effect on all airlines operating or intending to operate on the route concerned. Consideration should also be given to the impact of the proposed service on services provided on “adjacent” routes, which could be interpreted as routes to nearby destinations, or connecting routes having the same origin-destination pair.

4.3.3 Since these criteria are somewhat subjective in nature, States would have to determine the quantitative thresholds of minimum requirements on each potential route by making the economic case for assessment. These kinds of thresholds would normally be expressed in such forms as minimum frequencies per week, types or size of aircraft, and maximum levels of air fares (which could be determined in relation to comparative fares in a more mature, and perhaps neighbouring, market). In doing such specification exercises, a flexible and market-oriented approach would be more beneficial than tight control over all elements, because the airlines’ ability to be entrepreneurial would be constrained if the State specifies in too much detail what services would be required. In many instances, the airlines themselves may well be able to offer and exploit creative ways of meeting the requirement at a lower cost, once they are given the opportunity in the first place. An example of the flexible approach is to set minimum requirement of capacities only, leaving the airline to decide frequencies, aircraft types, tariffs etc. Capacity requirements could be defined in terms of numbers of seats from the origin(s) to the destination(s) as X “units of carriage” per week over part or all of the tourism season concerned (with X being incrementally larger for the high season), as with existing “blocked space” or “part-charter” arrangements between airlines and by tour operators with airlines. If the “blocked space” relates to more than one originating market, so much the better.

4.3.4 The potential exists that a specification of adequacy would influence airlines’ commercial decisions as to what services to operate and, where the route in question is already served by an airline, could give an incentive to exploit the scheme by an incumbent airline. This is because the consideration of the ESTDR application could be controlled to some extent by an airline’s own strategic behaviour, especially when a quantitative threshold based on the current market size of a route is used. For example, if a reduction in seat capacity below a certain percentage of that available in the last operating season automatically triggers the consideration of

[13] See ICAO (2004), *Manual on the Regulation of International Air Transport*, 2nd edition, Doc 9626, for the definitions of Fifth, Sixth and Seventh Freedom traffic rights, and other air transport terminology used in this study.

the ESTDR application, an incumbent on the route might announce a capacity reduction over this percentage in order to trigger the consideration of the application and so obtain regulatory assistance and, potentially, a subsidy. It might therefore be desirable to specify thresholds on a case-by-case basis taking into consideration the nature of each route, and to avoid using a blanket threshold reflecting the current market size[14].

4.4 Carrier selection

4.4.1 The next step would be to design the appropriate institutional mechanism as a means to allocate a targeted subsidy and in a way that market distortion and unfair competition are minimized. As discussed in the previous section, the mechanism commonly used by existing domestic- and regional-level EAS schemes is a competitive tendering/bidding system governed by the principles of transparency, accountability and equality of treatment. An auction-type arrangement would determine which airlines should undertake the provision of the required level of services on the route and, if necessary, the compensation those airlines should receive in return. The government could value the offer for that route, and make its choice by taking into consideration both the users' interest and the cost of financial compensation. In this process, the role of the government would be to act as an auctioneer rather than as a regulator. The motivating force of competitive tendering/bidding is that *ex ante* competition at the bidding stage would minimize the extent of subsidy payment by getting the airlines to reveal their true costs and bid down air fare levels to a competitive level, whether or not there is actual competition on the route prior to the tender. This system also gives a higher level of predictability about the provision of an adequate service satisfying pre-defined fixed standards.

4.4.2 Specifically, the tendering process could be launched with an appropriate degree of publicity where no airline had agreed to fulfil the required level of services on the route without financial compensation and/or regulatory assistance. The information included in an invitation to tender should cover, at least, general information on tender process, the required level and standard of services, the eligibility of bidders, the selection criteria, the rules governing changes and cancellation of the contract, the period of validity of the contract, and the penalties applicable in the event of non-compliance. A bid would usually take the form of the proposed business plan (including the commitment to the destination), flight schedule, air fares, and, if any, a subsidy amount.

4.4.3 The eligibility of an airline that could submit a tender would be dependent upon the air services agreements governing the route concerned. In principle, each State should not confer a special advantage on its national airlines, but treat equally under the same conditions with any interested airline of the other States, subject to the applicable air services agreements or special mutually-agreed arrangements governing the route concerned. In the case of non-scheduled air services, which are generally regulated on a national basis, tour operators or travel organizers could also be entitled to submit a tender jointly with aircraft operators.

4.4.4 Under a liberal regional air services agreement involving more than two States, for example, any interested airline of the member States with Third, Fourth and Fifth Freedom traffic rights could submit a tender to serve the route or a set of the routes. Airlines eligible to exercise Seventh Freedom traffic rights, where they exist, may also be invited to tender. For a transitional purpose, however, some States may wish to open the route initially to airlines with

[14] More detailed discussion about this issue can be found in U.K. Department for Transport (2004), "Annex A: Regional Air Services Partial RIA" in *Consultation on the Protection of Regional Air Services to London* (http:// www.dft.gov.uk/stellent/groups/dft_aviation/documents/divisionhomepage/035711.hcsp).

Third and Fourth Freedom traffic rights only, and gradually expand it to airlines eligible to exercise Fifth and Seventh Freedom traffic rights on the route. It would also be possible to include third country airlines (carriers of States which are not party to the agreement) with Fifth or Seventh Freedom traffic rights, unless the question of assessment of technical and financial fitness, or safety and security oversight would pose a concern. For instance, it could be highly relevant to include "community of interest" carriers, i.e. airlines of States, which are not the party to the agreement but are within a predefined group with a community of interest[15].

4.4.5 The selection of the airline would be either the tender requiring the lowest financial compensation or the overall best tender. Existing EAS schemes do not necessarily use a simple low-bid auction system in terms of a subsidy amount, but rather simultaneously consider a number of factors which are usually stated in an invitation to tender, such as air fare levels and conditions, the airline's financial viability and business plan, and codesharing relationship with major airlines. In the case of tourism development routes, bidders would be carefully evaluated also in terms of the way that they would develop effective partnerships with the tourism sector to pursue growth and a commitment to the destination (for example, investments in the required infrastructures, capacity building etc). Nevertheless, even where an overall assessment method is adopted instead of a low-bid system, the level of financial compensation would still be the most decisive criterion, because other criteria such as frequency, capacity, and air fare levels would generally already have been included as the service level requirements set out in the tender notice. It would only be in exceptional cases where significant tourism support can be demonstrated, duly justified, that the selected airline could be other than the one which requires the lowest financial compensation.

4.4.6 Through competitive bidding, the government may also wish to award a "franchise", i.e. an exclusive concession or licence to guarantee a monopoly, to one airline in conjunction with or in lieu of a subsidy. This would be a case where there is a tender requiring minimal or no financial compensation but rather seeking market protection. On a sustainable natural monopoly route, for example, if an airline were allowed to set its air fare at a level equal to average cost (total cost divided by service outputs) with the guarantee of a monopoly, then States would not need to provide a subsidy for the airline's operation, although the fare level is above marginal cost[16]. Any market protection measure including the guarantee of a monopoly, however, requires a sound legal basis given by the air services agreement governing the route concerned (see the discussion in the fifth section). In addition, even though States A and B limit eligible bidders to designated airlines of both States and guarantee a monopoly operation on the route between them to a selected airline, the entry of third country airlines into the protected route could not be blocked completely, because third country airlines' Fifth and Seventh Freedom operations are not governed by air services agreements between States A and B. The possibility would be very low, but contracts would need to reflect this possibility.

4.4.7 A tendering system that does not guarantee a monopoly operation to a subsidized incumbent would be more straightforward and, in many instances, could be implemented easily. Under this system, any eligible airline would be permitted to bid at any time to offer replacement

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15 See ICAO (1999, 2004, *ibid*).

16 If an airline were obliged to establish its air fare at a level that would correspond to marginal cost, a subsidy for the operation would be demanded because the airline would incur losses. By contrast, if the air fare level corresponding to average cost is considered too high for needy people such as those with low income and those with reduced mobility, then social subsidies to the individual passengers might be better than subsidies to airline concerned. In general, social subsidies should cover only specific categories of passengers travelling on the route (the entire population of the area in the case of underprivileged areas like remote islands). The downside of providing social subsidies is a risk that those not eligible to receive subsidies would press for similar treatment.

services on a subsidy-free basis. In response, the incumbent could choose to continue its service with no compensation or to withdraw from the route. Without guaranteeing a monopoly, the possibility of entry and the threat of replacement during the ongoing contract period could lead to a reduction of a subsidy amount requested at the bidding stage and restrain the incumbent from exercising its market power. This system might be effective when the route is considered to be a "contestable" market (i.e. there are other operators potentially capable of submitting valid bids due to low entry barriers) or is suspected of being neither a non-commercially viable nor a sustainable natural monopoly route. Nevertheless, it should be borne in mind that this mechanism would have the same disadvantages as a short-term contract (see paragraph 4.5.1 below). Also, if the route were clearly a sustainable natural monopoly, then entry of new airlines would neither be profitable nor necessarily enhance the market efficiency. Furthermore, there would probably be some situations where no airline wishes to operate without the guarantee of a monopoly.

4.4.8 Competitive bidding has many merits, but this presupposes that there will be a sufficient number of potential bidders to offer the required service. That might not always be true. Due to the economic nature of the route, to which an ESTDR scheme is applied, in particular, bids by third-country airlines with Fifth and Seventh Freedom traffic rights might be very limited (this would of course depend on the nature and level of the required subsidy). In the case of no bidder, contractual arrangements would probably be negotiated with an incumbent, if one exists, in which the incumbent would have a strong bargaining position. When the number of bidders, whether actual or potential, is one or a few, it is also likely that the airlines in question would possess a certain amount of influence over their governments. In those circumstances, a great deal of attention would need to be paid to the way in which the bids are assessed, to transparency of the process, and also to any appeals mechanism, which should be seen to be fair. This may be an area where consultations and a dispute resolution mechanism prescribed by air services agreements might be linked to an ESTDR scheme to provide the necessary degree of confidence in the process of bidding. A possible method to increase the number of potential bidders is discussed in paragraph 4.8 below in the context of supplementary measures.

4.5 **Contract duration**

4.5.1 With respect to the contractual arrangement for the post-bidding stage, two possible options exist. The first option is to use a recurrent short-term contract, where short-term is usually in the order of two to three years. In this case, the right to receive regulatory assistance is being put up for auction with relatively short intervals, and thus enabling cost and demand changes to be generally handled through re-contracting. This procedure would provide the incumbent with an incentive to honour its current contract, because it would otherwise be penalized in the next round of bidding through differential treatment by the State. A short-term contract would also allow States to review quite frequently whether there is a continued need for the ESTDR application to remain in place.

4.5.2 However, a short-term contract has several disadvantages. For example, a short-term contract might reduce the incentive for airlines to market the route on an ongoing basis, discourage them from making desirable long-term investments, and could eliminate the possibility of airlines taking advantage of longer, cheaper aircraft leases. Also, with a short contract period, the start-up cost incurred together with the risk of losing the contract after only a few years, would lead to higher risk premiums especially for new entrants. Because of these considerations, it is unlikely that an airline would favour short-term arrangements, given the time and commitment that it takes to build "thin" markets. This might have an effect of reducing participation in the tender contests and increasing the level of compensation required.

4.5.3 The second option is to use a long-term contract, having a five- to seven-year period. The principal merit of a long-term contract is that it could reduce risk premiums for potential new bidders, and enable the incumbent airline and tourism industry to confidently invest in infrastructure and market development, inasmuch as it is assured of being around to receive the returns from the investment. Use of a long-term contract would, for instance, be attractive where the airport involved is small with poor facilities and the operational requirements necessitate high "sunk" investments (meaning that the capital commitment cannot be completely recovered after the investment decision was made), which an airline would be reluctant to make if the contract period were too short. On the downside, a long-term contract might give certain strategic advantages to the current incumbent over prospective entrants at renewal time, mainly because of having already made the necessary investment, established wider market acceptance with brand loyalty, and obtained better information on the market. These advantages might provide the incumbent with the ability to take advantage of the situation by forcing favourable changes in the original contract. Also, since a long-term contract, particularly with the guarantee of a monopoly, would reduce cost pressure on the selected airline, there might be a risk of discouraging innovation and the development of more efficient services, new products and lower air fares.

4.5.4 Another major concern related mostly to a long-term contract is that economic environments change over time, most often in ways that are unanticipated, so that the initial contractual conditions might not be desirable at a later stage. In order to take account of unforeseeable developments, the provisions of the contract should include rules governing changes to and cancellation of the original contract, allowing some degree of flexibility in terms of adjustment (both reduction and increase) of a subsidy amount and required level of services. A mid-term review or review at regular intervals could also be included to verify and update the contractual conditions, if necessary. Notwithstanding such back-up provisions, since a long-tem contract is inevitably incomplete in the sense that all contingencies cannot be contractually provided for, States would be put in the position of having to enforce, monitor, audit, and renegotiate with the incumbent. However, enforcement, monitoring, audit and re-negotiation are not costless, and would often require some sort of detailed governance institutions, procedures and arrangements. As a result, a long-term contract might carry a potential risk of creating more regulation of the airline industry rather than less.

4.5.5 It is important to note that, regardless of the question as to the duration of the contract, the ESTDR application would not be permanent but transitional or only for a reasonable period of time (mostly for a start-up period) especially on routes serving "development areas", including tourism development routes, because changes in the demand and cost conditions over time would make the ESTDR application to some existing routes unjustified. For instance, if the demand grows sufficiently as the travelling public increasingly recognizes the destination or as a direct result from the network development, the route may be transformed away from being a sustainable natural monopoly, so that the basis for the ESTDR application would no longer exist. The reduction in the airline's fixed cost through the improvement of the aviation infrastructure may also make it less likely that the route is a sustainable natural monopoly.

4.5.6 While the foregoing discussion has focused primarily on the duration of the contract, which has implications for airlines' efficiency and incentives, ultimately the nature of the contract should be determined on a case-by-case basis. The provisions of the contract would cover, *inter alia*, the requirements as to operation (required level and standard of services), the amount of financial compensation including the payment method and frequency, the rules concerning amendment, termination or review of the contract, the duration of the contract, the dispute settlement procedure, and the penalties in the event of failure to comply with the contract.

4.6 Subsidy payments

4.6.1 When the contract arising out of an invitation to tender includes the payment of a subsidy by way of compensation for the required operation, the State having called for the tender (usually a tourism-receiving country in the use of the ETDR application of the scheme) would compensate a selected airline (or tour operator in the case of non-scheduled air services) on an after-the-fact reimbursable basis. In principle, the amount of compensation finally granted should correspond to the amount that the airline explicitly stated in the tender, i.e. the airline's *expected* shortfall between revenues and costs generated by the service including a reasonable profit for capital employed. Even if the amount of compensation finally granted is determined or adjusted periodically in arrears on the basis of the *recorded* shortfall actually incurred, it should not exceed the amount requested by the airline in the tender. As discussed in paragraph 4.5.4, only when substantial and unforeseeable changes in the operating conditions occur during the contract period, could this maximum limit be amended through the mid-term review or re-negotiations.

4.6.2 In the interests of good governance and transparency, the requested subsidy amount and the reimbursement should be assessed thoroughly by some analytical accounting system. This is particularly important in the case of a single bidder as well as when the government has to negotiate with an incumbent. The challenge here is how to allocate the relevant costs, a significant portion of which are common or joint costs, i.e. ones incurred in serving more than one route, to the specific service. It is often the case that many costs overlap between the subsidized route and other routes[17], because the route(s) normally form a part of a complex network, which consists of many routes with varying traffic densities.

4.6.3 A widely-used method to allocate the costs is a "fully distributed cost (FDC)" approach, having identified those costs that are directly attributed to each service, then allocating all other costs including common or joint costs and indirectly attributable costs according to pre-defined allocation rules (for example, on the basis of physical units of utilization by each operation and in proportion to the costs that can be directly assigned to each route). These allocation rules are generally mechanical and therefore easy to implement. However, they could be simultaneously arbitrary; and thus an FDC approach might lead to certain services carrying a higher or lower burden of common or joint costs than might economically be justifiable, resulting in over- or under-compensation. If a reimbursement involved overcompensation, a beneficiary airline has the potential to cross-subsidize between the subsidized routes and the routes in which it is in competition with other airlines. Another potentially negative effect is that an FDC approach would not provide the selected airline with a strong incentive to pursue efficiency. This is because the costs so determined are average, not marginal. In other words, since they are not measured by what amount costs would be increased or decreased if additional quantities of any particular service were taken or the service were correspondingly curtailed, the airline would not be pressured to approach the service from the point of view of making it an add-on to other things (for example, making use of spare capacity in an existing network of services).

4.6.4 Those risks of overcompensation and inefficiency associated with an FDC approach could be partially mitigated by attracting a sufficient number of potential bidders. The competition at the bidding stage could induce airlines to reveal the information on their cost structures as accurately as possible and allocate common or joint costs by themselves in a more competitive way by taking into consideration the price elasticity of demand. Also, setting only

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[17] The level of common or joint costs is represented by the difference between the incremental costs (those that would be avoided were that service not provided) and the stand-alone costs (those that would be incurred if the service were provided in isolation).

minimum requirements for the adequacy instead of specifying all the elements could effectively bypass many allocation issues. For example, by specifying the adequacy only in terms of the number of seats offered at the network level (such as "block seat" type specification, see paragraph 4.3), airlines could seek out the most efficient market-based solution in the choice of aircraft type, frequencies and air fares to match market needs and operational requirements across the network.

4.7 Sources of financing

4.7.1 When the provision of subsidies is required, the State having called for the tender, usually a tourism-receiving country, should have a prime responsibility to secure the necessary funds for subsidies. In many instances, subsidies of this nature would simply involve funding from the central budget, without any consideration as to how such funds are raised. Indeed, the expenses could be partly offset by reduced dependence on generic direct subsidies for airlines and using the previously allocated money for the ESTDR's subsidy payment. However, for any public fund that involves a net expansion in spending, it is necessary to weigh the benefits of the fund against the resource costs of raising the required tax revenue. From an economic analysis and efficiency perspective, the issue of the kind of taxes that could be used for subsidies should be examined carefully in order to use the most efficient source[18].

4.7.2 If the State having called for the tender faces budgetary constraints or other national spending priorities, then it would need to seek financial support from or make a collaboration arrangement with outside bodies in order to ensure enough funds for subsidies. Many LDCs may be in this situation and often could not raise the required funds single-handedly. Possible outside support or arrangements might include, but would not be limited to, bilateral aid from the other party of the air services agreement concerned (a tourism-generating country), third-party aid from development agencies (international organizations and institutions including special funds maintained by such agencies), and the participation of the private sector (tourism entities, local businesses, airports and airlines) in an ESTDR system by the establishment of a PPP. In addition to such direct funding methods, the supplementary measures discussed in paragraph 4.8 below could alleviate the tourism-receiving State's financial burden.

4.7.3 Bilateral aid from the other State for supplementary funding might be administered by pre-arranged joint financing or fund-pooling mechanisms between States concerned with a higher percentage of contribution from tourism-generating countries (developed countries and some developing countries with high international tourism expenditures). Bilateral grant and loans through Official Development Assistance (ODA) programmes could be used for this purpose. The concern associated with bilateral aid is that it would never be easy to rely totally on other States' financial assistance because, *inter alia*, of domestic legislative limitations that may exist (for example, some States do not allow the subsidization of foreign competitors) and the possible risk of providing recipient States with an incentive to expand the ESTDR application even to the routes where the economic benefits are small relative to their costs.

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[18] The most efficient fund might be revenue from a lump-sum tax, i.e. a tax of a fixed amount that has to be paid by everyone irrespective of the level of his or her income. This is because a lump-sum tax such as a poll tax would not distort other taxpayers' decisions and incentives throughout the economy and could be collected from taxpayers with very little cost. Even so, such kind of taxes are rarely, if ever, used in practice; and thus most commonly-used taxes would be income and sales taxes despite their creation of inefficiencies to some extent. A local tax could also be used for finance if it is the responsibility of local governments to reimburse the central governments for any funds provided for subsidies. The use of a local tax means that the cost is borne by those benefiting from positive externalities arising from air services on the subsidized routes.

4.7.4 Third-party aid from international development agencies could be used for the ESTDR's subsidy payment if a State identifies tourism as a major plank of its MDG, PRSP or CAS achievement plans (see paragraph 2.2.3) and puts it into the formal projects with its development partners. Also, if development agencies are seeing tourism as a major factor in poverty alleviation, then they could allocate the funding as part of their national allotments. In reality, the simplest and most logical vehicle for this type of financing arrangement would be to apply whatever approach and criteria are applicable to the specific situation *within the development framework of the State concerned.* This would allow for the establishment of conditions, which would also meet possible criteria established by development agencies on market orientation, infrastructure, capacity building and the like. Air services simply become soft infrastructure and capacity building mechanisms, which would drive foreign exchange and export income.

4.7.5 A pragmatic way to supplement public financing would be to form a PPP by bringing together both public and private stakeholders including national and local governments (with open participation of other interested States), tourism entities, local businesses, airports and airlines. The well-organized and properly-run PPPs could even play a day-to-day administrative role in the scheme, sharing the regulatory costs and risks associated with the process of enforcement, monitoring, audit and re-negotiation. Nowadays, public authorities increasingly entrust the provision of public services (for example, education, health, tourism, local motorway and waste water) to PPPs and limit themselves to defining objectives, monitoring, regulating and, where necessary, financing those services. Although PPPs could never be a complete solution for States facing budgetary constraints, the management skills and financial acumen of private businesses could create better value for money for taxpayers, when proper cooperative arrangements between the public and private sectors are used.

4.8 **Supplementary options**

4.8.1 Consideration may need to be given to a number of optional measures, which are supplementary or alternatives to an ESTDR scheme. A key point is that subsidizing air services might not be enough for the route developments and the objectives discussed in paragraph 2.2 might be achieved more effectively if an ESTDR scheme is organized strategically as one part of an integrated development package. Especially in the case of tourism development routes, airlines would not pioneer new routes when tourism facilities and promotion are underdeveloped, while property developers would be reluctant to invest in resorts when there are not reliable air services. Unless such a "chicken-and-egg" problem is overcome, there would be no airline or a very limited number of airlines that express interest in participating in the bidding process even though an ESTDR scheme is established.

4.8.2 The supplementary measures would also be of particular importance where a State does not have enough funds for subsidies, because they could contribute to reducing the absolute subsidy amounts and the number of subsidized routes in the mid- or long-term with relatively smaller implementation costs, if properly designed. Some of such measures would not necessarily be funded by States' budget resources alone but rather could be implemented by using the funds of the PPP arrangements with the tourism industry, local business communities, airports and airlines. Since the problems for most "thin" routes are high fixed costs of providing services, low demand and the lack of awareness of potential, the financial commitments associated with an ESTDR scheme could be cut down if airlines' operating costs were reduced or if demand and the destinations' attractiveness were increased by supplementary measures.

4.8.3 In general, there would be two types of measures, which also supplement each other. One is a supply-side measure, i.e. a way of sharing the financial risk of a new service with an airline by giving various kinds of indirect subsidies and incentives to the airline, thereby reducing its operating cost and raising the profile of the destination concerned. These could include special tax exemptions; non-discriminatory introductory discounts or exemptions on charges for airport services including landing charges and station fees; discounts on the price of the supply of fuel; reduction in ground handling tariffs; upgrades of terminal and apron area; provision of office space; and discount rates for hotel rooms and ground transportation for flight crews. The other is a demand-side measure designed to attract more tourists and businesses to the catchment area of the airport, thereby breaking a fundamental "chicken-and-egg" problem and generating the amount of inbound traffic sufficient for the long-term viability of a route. For example, promotional and marketing activities such as hosting special events and developing an advertising campaign in cooperation with the local travel industry would enhance the public awareness of the destination. The provision of incentives for tourism entities such as hotels, restaurants, car rental operators and other attractions would indirectly generate demand for air services. For this measure, it is critical to conduct market research, and States could use the research results as credible evidence of demand to attract developers and airlines.

4.8.4 Supplementary measures are a type of indirect subsidies, which are constructed in a more targeted manner. As discussed in paragraph 2.3.6, indirect subsidies tend to have fewer implications of subverting the outcomes of liberalization, but are not free from the effect on competition and trade. As a premise, therefore, any supplementary measure should be governed by the same conditions and principles as those applied to an ESTDR scheme itself and indirect subsidies, including principles set out in Article 15 of the Chicago Convention. That is, any assistance should be justified by a well-defined purpose and objective criteria, be transparent through publishing the existence together with the criteria on which it is offered, be provided through the competitive selection procedures without discrimination among the airlines that may benefit, be limited in terms of duration, and have a strict link between the aim and the level of financial compensation[19]. With regard to airport charges, it should be noted that governments should ensure, as far as is practical, that any resultant under-recovery costs properly allocable to the users concerned is not shouldered on to other users.

5. REGULATORY ARRANGEMENT

5.1 This section of the study discusses regulatory arrangements for the implementation of an ESTDR scheme, which should ensure the efficient functioning of the scheme with a high degree of transparency and the legal certainty. The simplest approach is to implement the scheme unilaterally but as a "reduced form" (such as one without the guarantee a monopoly operation). A more complex approach is to conclude a special clause for an ESTDR scheme under a bilateral, regional or plurilateral arrangement with the States concerned, so that a State could implement the scheme as a "full-scale form" (such as one involving the guarantee of a monopoly operation, if necessary).

[19] These conditions and principles would be compatible with the European Commission's latest decision on the establishment of Ryanair at Charleroi in 2004 (*OJ* L 137, 30.4.2004, http://europa.eu.int/eur-lex/pri/en/oj/dat/2004/l_137/l_13720040430en00010062.pdf) and its draft guidelines on financing of airports and start-up aid to airlines departing from regional airports, which was issued in 2005 (http://europa.eu.int/comm/transport/air/rules/state_aid_consultation_en.htm) to supplement existing 1994 guidelines on State aids in the aviation sector (*OJ* C 350, 10.12.1994, http://europa.eu.int/comm/competition/state_aid/legislation/94c350_en.html).

5.2 Unilateral approach

5.2.1 The unilateral implementation of an ESTDR scheme by national laws, rules and/or regulations may be the most feasible in practical terms. This method has a merit that an individual State could apply its own uniform scheme to all the routes at a single stroke, avoiding the procedural differences across the network. Also, the scheme could be implemented fairly quickly, because the amendment (at least pre-amendment) of existing air services agreements, which would often entail long and complex negotiation processes, would not be required. It may, therefore, be attractive particularly for States wishing to provide emergency subsidies to deal with extraordinary situations such as when the route is under threat of a sole incumbent's withdrawal, suspension or reduction of an existing service below an adequate level, or when a sole incumbent suddenly terminates scheduled services because of bankruptcy.

5.2.2 By setting up a unilateral regulatory framework with appropriate rules and procedures, States could provide direct subsidies, as well as most indirect subsidies as supplementary measures, to a selected airline. Non-scheduled air services, which are generally regulated on a national basis, could also be promoted under a unilateral arrangement. The limitation of this method is that the States, especially those which are party to a liberal air services agreement, could only implement a reduced form of an ESTDR scheme, i.e. one neither guaranteeing a monopoly operation nor imposing restrictions on elements such as frequency, capacity, and/or tariffs offered by airlines of the other States except for certain special circumstances. If the unilateral scheme intends to guarantee a monopoly in the contract or impose restrictions on such elements, then it may raise bilateral issues with other States concerned, pulling the trigger on the procedure of consultations and a dispute resolution mechanism, and the amendments of the air services agreement.

5.3 Bilateral, regional or plurilateral approach

5.3.1 The endorsement of an ESTDR scheme through a bilateral, regional or plurilateral air services agreement could enable a State to implement it in a full-scale form, which could incorporate elements such as market access, frequency, capacity, number of designated airlines and/or tariffs. The major complication in dealing with an ESTDR scheme by a special clause in an air services agreement is to what extent it should elaborate upon the elements discussed in the previous section, i.e. the criteria for the selection of eligible routes, adequate service levels, the procedure of tendering for the carrier selection, the contents of contractual arrangements, the method of subsidy payments, the source of financing, and the mechanism related to enforcement, monitoring, audit and re-negotiation. The simplest method may be to avoid including details about such elements, thereby allowing individual States to exercise pragmatism and flexibility in how they interpret and administer them. Although broader discretionary powers conferred on individual States could give rise to different regulatory judgements and preferences in the light of their political choices, the inclusion of both *ex ante* and *ex post facto* review-style consultations between States and/or the requirement of getting an advance agreement from other State(s) could be an effective deterrent against a potential risk that each State would favour its national airlines and use the scheme excessively.

5.3.2 Below is a model of an "Annex on Essential Service and Tourism Development Routes" for inclusion in a bilateral air services agreement[20]. It can also be adapted for regional or plurilateral use simply by changing the term "the other Party" to "the other Parties". The feature of this model is that it explicitly provides three options for support: a) a guarantee of a monopoly

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20 As an ICAO model clause, its use is entirely discretionary.

operation with a subsidy, b) a guarantee of a monopoly without a subsidy, or c) a subsidy without a guarantee of a monopoly operation, when no airline has assumed or is about to assume an air service at the adequate level without the application of an ESTDR scheme. Optional words or sentences are presented in square brackets. For example, the optional texts in paragraph 3 require an incumbent airline to file an advance notice of its intention to withdraw or reduce services on the route. This Annex can also be modified by States to meet their particular circumstances.

ANNEX ON ESSENTIAL SERVICE AND TOURISM DEVELOPMENT ROUTES

1. A Party, following consultations with (or after having consent of) the other Party and after having informed an airline or airlines operating on the route, may specify an essential air service route or an essential tourism development route linking a point in a remote or peripheral area or a development area in its territory with a point in the territory of the other Party. On such route or a group of routes, an adequate level of air services set forth in Paragraph 2 of this Annex shall be considered vital for the protection of the lifeline provision for or the economic development of an area, [including tourism route development], but would not be provided if airlines solely considered their commercial interest [or could be provided solely at unreasonably discriminatory, unduly high or restrictive prices].

2. The Party having specified an essential air service route or an essential tourism development route shall assess an adequate level of scheduled air services [on each route or a group of routes][in a flexible and market-oriented manner], taking into consideration, inter alia, the particular needs for scheduled air services on the route concerned; the level of demand; the availability of connecting air services, third country airlines, non-scheduled operators and other forms of transport; air fares and conditions; and the effect on all airlines operating or intending to operate on the route and adjacent routes. [Non-scheduled air services may also be considered adequate, provided they meet the terms set forth in Paragraph 1 of this Annex.]

3. [Notwithstanding the provisions of Article __ (Capacity) and Article __ (Pricing)], the Party concerned, following consultations with (or after having consent of) the other Party, may require an airline operating or intending to operate on an essential air service route or an essential tourism development route to provide air services satisfying the adequate level for a period of up to __ years. [The Party may require an airline wishing to terminate, suspend or reduce an existing service on the route below an adequate level to file notice at least __ days prior to the proposed service reduction.]

4. Notwithstanding the provisions of [Article __ (Capacity), Article __ (Pricing) and] Annex __ (Route schedules), if no airline has assumed or is about to assume air services at the adequate level [individually or in the aggregate] on an essential air service route or an essential tourism development route, the Party concerned may invite applications to provide such services, and if necessary and following consultations with (or after having consent of) the other Party, may limit access to that route to only one airline [excluding airlines of third countries] for a period of up to __ years, and/or provide the payment of subsidy compensation to the airline. The right to operate such services shall be offered by public tender [either singly or for a group of such routes] to any designated airline entitled to operate [and market] its service between the territories. [Airlines of third countries eligible to operate on the route shall also have the right to tender].

5. The invitation to tender and subsequent contract shall cover, inter alia, the following information: the required level and standard of services set forth in Paragraph 2 of this Annex; the period of validity of the contract; rules concerning amendment, termination or review of the *contract, in particular to take account of unforeseeable changes; and penalties in the event of failure to comply with the contract.*

6. The selection of an airline shall be made within a period of __ months by the Party having issued the invitation of tender, taking into consideration, inter alia, applicants' financial viability, proposed business plan, ways to develop partnerships with the tourism sector, air fares and conditions, and the amount of the compensation required, if any.

7. The Party having issued the invitation of tender may reimburse an airline, which has been selected under Paragraph 6 of this Annex, for the losses as a result of the required operation at the adequate level in accordance with the contract. Such reimbursement shall be assessed as the [expected] shortfall between costs and revenues generated by the service with a reasonable remuneration for capital employed. [No additional subsidy shall be paid for services above the adequate level that the airline may choose to undertake.]

8. Consultations between the Parties shall be arranged in accordance with Article __ (Consultation) whenever either Party considers that the selection of and/or compensation for an airline are inconsistent with the considerations set forth in Paragraphs 6 and 7 of this Annex, or that the development of and competition on a route is being unduly restricted by the terms of this Annex. [If the Parties fail to reach a resolution of the problem through consultations, either Party may invoke the dispute settlement mechanism under Article __ (Settlement of disputes) to resolve the dispute.]

5.3.3 Since the interpretation and administration of an ESTDR scheme are left to individual States to some extent, it might be necessary for each State, *inter alia*, to: clarify its interpretation of each criterion for the selection of eligible routes (such as the terms "remote or peripheral areas" and "development areas"); specify the adequate service levels as quantitative thresholds (such as minimum number of frequencies and the number of "block seats"); elaborate the tendering procedure (including a format of an invitation of tender and a standard text of a contract); establish a mechanism of enforcement, monitoring, audit and re-negotiation (which is not covered by the above Annex); and decide on the budgetary or other sources for the administration of the scheme and subsidy payments (also not covered by the above Annex). Also in some States, domestic legislation may be required, for example, to enable governments to pay subsidies for airlines, to allow the delegation of the decision-making power to local and regional authorities, and to exempt, if possible, the scheme from the application of any relevant competition laws.

6. CONCLUSION

6.1 In summary, growing and widespread liberalization, privatization and globalization call for regulatory modernization with respect to State assistance for airlines' operations on specific international routes of a public or social service nature serving remote or development areas, including tourism development routes. This is especially the case where accessibility should be preserved because of socio-economic objectives but is threatened because of financial non-viability and commercial uncertainty. There may be a number of international markets that are not operated or are under-served but are potentially viable given appropriate support, with substantial economic spin-off benefits which are not currently being realized. The underlying rationale for the application of a domestically-developed EAS scheme internationally, which could eventually replace both generic support to airlines on the basis of their financial needs as a whole and regulatory cross-subsidization, is that such international routes might be considered *de facto* equivalent to domestic and regional routes currently supported by several developed countries that have committed to liberalization. Moreover, most of the essential parameters and modalities are transferrable to the international environment. The analysis in this study provides a step-by-step analytical approach to constructing an ESTDR scheme, which could be used for the international implementation of both EAS and ETDR concepts. It should be borne in mind, however, that any State assistance including an ESTDR scheme would affect or threaten to affect trade between States and competition, to a varying extent. The rules of the game should, therefore, be clearly laid down and observed by all the parties. The foregoing discussions as well as the model clause presented in this study could serve as a practical checklist and a possible regulatory framework for States to effectively implement an ESTDR scheme. For LDCs, the use of this scheme for essential tourism routes could have even broader benefits than the public service objective.

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APPENDIX A

Passenger Traffic Links to/from Least Developed Countries (by frequencies)

In order to demonstrate the extent to which air services do (or do not) currently exist between tourism-generating markets and tourism destinations, some analysis has been undertaken of flight schedules. The following table focuses on tourism destinations that are Least Developed Countries (LDCs). The columns in the table are 50 LDCs, which are taken from the web site of the relevant United Nations' Office (http://www.un.org/special-rep/ohrlls/ldc/list.htm) and grouped by ICAO statistical region. The rows in the table are tourism-generating markets that consist of a) countries/areas that have air services to/from LDCs and b) ones that do not have air services to/from LDCs but are either in the world's top 25 international tourism spenders in 2002 or in the top 30 in terms of the gross domestic product (GDP) in 2003.

Note: The table shows scales of annual flight frequencies (both outbound and inbound) on respective State-pair routes in 2004:
- A, B, C, D and E denote 700 or more, 200 - 699, 100 - 199, 50 - 99, 1 - 49 frequencies respectively;
- Dark-gray shade denotes States which are included in both the world's top 25 international tourism spenders in 2002 and in the top 30 in terms of GDP in 2003, plus Ireland and Singapore (which are not in the top 30 GDP);
- Light-gray shade denotes States which are included in the world's top 30 GDP in 2003, but are not in the top 25 international tourism spenders in 2002.

Passenger links to (by Region) \ LDCs	AFGHANISTAN	BANGLADESH	BHUTAN	CAMBODIA	LAO PEOPLE'S DEM. REP.	MALDIVES	MYANMAR	NEPAL	TIMOR-LESTE	KIRIBATI	SAMOA	SOLOMON ISLANDS	TUVALU	VANUATU	YEMEN
ASIA / PACIFIC															
AFGHANISTAN	A														
BANGLADESH		A	D				B	A							D
BHUTAN		D					B	B							
CAMBODIA				A	A										
INDIA	A	A	B			A	B	A							B
INDONESIA									A						B
JAPAN		C		E		B		C							
LAO PEOPLE'S DEM. REP.				A	A										
MALAYSIA		A		A		B	B	B							B
MALDIVES						A									
MYANMAR		B	B				A								
NEPAL		A	B					A							
CHINA (incl HONG KONG & MACAO)	C	B		A	B		A	A							
PAKISTAN	B	B						B							
PHILIPPINES		E													
REPUBLIC OF KOREA				D											
SINGAPORE		A		A		B	A	C							
SRI LANKA		E				A									
TAIWAN (PROVINCE OF CHINA)				B			B								
THAILAND		A	B	A	A	D	A	A							
VIETNAM				A	A										
AMERICAN SAMOA											A				
AUSTRALIA									A		B			A	

Passenger links to (by Region) \ LDCs	ANGOLA	BENIN	BURKINA FASO	BURUNDI	CAPE VERDE	CENTRAL AFRICAN REPUBLIC	CHAD	COMOROS	DEM. REP. OF THE CONGO	DJIBOUTI	EQUATORIAL GUINEA	ERITREA	ETHIOPIA	GAMBIA	GUINEA	GUINEA-BISSAU	LESOTHO	LIBERIA
ASIA / PACIFIC																		
AFGHANISTAN																		
BANGLADESH																		
BHUTAN																		
CAMBODIA																		
INDIA												E	B					
INDONESIA																		
JAPAN																		
LAO PEOPLE'S DEM. REP.																		
MALAYSIA																		
MALDIVES																		
MYANMAR																		
NEPAL																		
CHINA (incl HONG KONG & MACAO)													B					
PAKISTAN													D					
PHILIPPINES																		
REPUBLIC OF KOREA																		
SINGAPORE																		
SRI LANKA																		
TAIWAN (PROVINCE OF CHINA)																		
THAILAND													B					
VIETNAM																		
AMERICAN SAMOA																		
AUSTRALIA																		

Passenger links to (by Region) \ LDCs	MADAGASCAR	MALAWI	MALI	MAURITANIA	MOZAMBIQUE	NIGER	RWANDA	SAO TOME AND PRINCIPE	SENEGAL	SIERRA LEONE	SOMALIA	SUDAN	TANZANIA	TOGO	UGANDA	ZAMBIA	HAITI
ASIA / PACIFIC																	
AFGHANISTAN																	
BANGLADESH																	
BHUTAN																	
CAMBODIA																	
INDIA													B				
INDONESIA																	
JAPAN																	
LAO PEOPLE'S DEM. REP.																	
MALAYSIA																	
MALDIVES																	
MYANMAR																	
NEPAL																	
CHINA (incl HONG KONG & MACAO)																	
PAKISTAN																	
PHILIPPINES																	
REPUBLIC OF KOREA																	
SINGAPORE																	
SRI LANKA																	
TAIWAN (PROVINCE OF CHINA)																	
THAILAND	C													E			
VIETNAM																	
AMERICAN SAMOA																	
AUSTRALIA															C		

Passenger links to (by Region) \ LDCs	AFGHANISTAN	BANGLADESH	BHUTAN	CAMBODIA	LAO PEOPLE'S DEM. REP.	MALDIVES	MYANMAR	NEPAL	TIMOR-LESTE	KIRIBATI	SAMOA	SOLOMON ISLANDS	TUVALU	VANUATU	YEMEN
FIJI										B	B	E	B	B	
MARSHALL ISLANDS										C					
NAURU										B		B			
NEW CALEDONIA (FRANCE)														B	
NEW ZEALAND											A	E		B	
NIUE											C				
PACIFIC OCEAN														E	
PAPUA NEW GUINEA												B			
SAMOA											A				
SOLOMON ISLANDS												A		C	
TONGA											B				
VANUATU												C		A	
MIDDLE EAST															
BAHRAIN		B													B
IRAN ISLAMIC REP. OF	B	C													
ISRAEL															
JORDAN															B
KUWAIT	C	A													C
LEBANON															B
OMAN		A													
QATAR		A				A		A							B
SAUDI ARABIA	C	A				E		B							A
SYRIA															B
UNITED ARAB EMIRATES	A	A				A		A							A
YEMEN		D													A
EUROPE															
AUSTRIA						B	E	D							
BELGIUM		B													
CZECH REPUBLIC						E									
DENMARK															
FINLAND															
FRANCE		D				E									B
GERMANY	B	D				B									B
GREECE															
IRELAND															
ITALY		B				B	E								B
NETHERLANDS								D							
NORWAY															
POLAND															
PORTUGAL															
SPAIN															
SWEDEN															

Passenger links to (by Region) \ LDCs	ANGOLA	BENIN	BURKINA FASO	BURUNDI	CAPE VERDE	CENTRAL AFRICAN REPUBLIC	CHAD	COMOROS	DEM. REP. OF THE CONGO	DJIBOUTI	EQUATORIAL GUINEA	ERITREA	ETHIOPIA	GAMBIA	GUINEA	GUINEA-BISSAU	LESOTHO	LIBERIA	MADAGASCAR	MALAWI	MALI	MAURITANIA	MOZAMBIQUE	NIGER	RWANDA	SAO TOME AND PRINCIPE	SENEGAL	SIERRA LEONE	SOMALIA	SUDAN	TANZANIA	TOGO	UGANDA	ZAMBIA	HAITI
FIJI																																			
MARSHALL ISLANDS																																			
NAURU																																			
NEW CALEDONIA (FRANCE)																																			
NEW ZEALAND																																			
NIUE																																			
PACIFIC OCEAN																																			
PAPUA NEW GUINEA																																			
SAMOA																																			
SOLOMON ISLANDS																																			
TONGA																																			
VANUATU																																			
MIDDLE EAST																																			
BAHRAIN																														C					
IRAN ISLAMIC REP. OF																																			
ISRAEL													B																						
JORDAN												E																		B			C		
KUWAIT																																			
LEBANON													B																						
OMAN																														C	A				
QATAR																														A					
SAUDI ARABIA												B	B								C						D			A		E			
SYRIA																														B					
UNITED ARAB EMIRATES							D	E		B		E	A								C								B	A	A	E	A		
YEMEN								B		A		B	B																	B	C				
EUROPE																																			
AUSTRIA																																			
BELGIUM	C								A					B	B			C							B		B	B					B		
CZECH REPUBLIC																																			
DENMARK																																			
FINLAND																																			
FRANCE	C	A	A		C	C	B	D	B	B	C		B		B				A		A	B		B			A			D		B			
GERMANY					C							B	B	E													C			B	D				
GREECE																																	C		
IRELAND																																			
ITALY					E							B	A						C								B								
NETHERLANDS					C						B	E	B															C			A				
NORWAY																																			
POLAND																																			
PORTUGAL	B				A											B							B			B	B								
SPAIN					B						B											B					A								
SWEDEN													B																						

LDCs / Passenger links to (by Region)	AFGHANISTAN	BANGLADESH	BHUTAN	CAMBODIA	LAO PEOPLE'S DEM. REP.	MALDIVES	MYANMAR	NEPAL	TIMOR-LESTE	KIRIBATI	SAMOA	SOLOMON ISLANDS	TUVALU	VANUATU	YEMEN	ANGOLA	BENIN	BURKINA FASO	BURUNDI	CAPE VERDE	CENTRAL AFRICAN REPUBLIC	CHAD	COMOROS	DEM. REP. OF THE CONGO	DJIBOUTI	EQUATORIAL GUINEA	ERITREA	ETHIOPIA	GAMBIA	GUINEA	GUINEA-BISSAU	LESOTHO	LIBERIA	MADAGASCAR	MALAWI	MALI	MAURITANIA	MOZAMBIQUE	NIGER	RWANDA	SAO TOME AND PRINCIPE	SENEGAL	SIERRA LEONE	SOMALIA	SUDAN	TANZANIA	TOGO	UGANDA	ZAMBIA	HAITI
SWITZERLAND						C																				B																				B				
TURKEY	B														E																														C					
UNITED KINGDOM		A				C									B	B									C	C		A	B						E								B		B	B		B	B	
AZERBAIJAN	B																																																	
RUSSIAN FEDERATION	B					D										D																																		
UZBEKISTAN	C	B																																																
AFRICA																																																		
ALGERIA																		C																		B	C		C			C								
ANGOLA																A				E				C				C													C									
BENIN																		B			B			C		B			C	C						A	B		C			A					A			
BURKINA FASO																	B	B																		A	C		A			A					B			
BURUNDI																												B												A										
CAMEROON																	A				B	B		B		A		B								B						B					B			
CAPE VERDE																E				A											E											A								
CENTRAL AFRICAN REPUBLIC																	C					D		C																					B					
CHAD																					C							B								B									E					
COMOROS															B								A		E									B											C	B				
CONGO																B	A				B			B				B								A						B					A			
COTE D'IVOIRE																	A	A										B	B	A			B			A	B		B			A	C				A			
DEM. REP. OF THE CONGO																C	B				E			A				B							D											C			A	
DJIBOUTI															A								E				C	A																A		E		B		
EGYPT															A		E										C	B																	A	E		D		
EQUATORIAL GUINEA																	B									A																					D			
ERITREA															B										C																				B	E		E		
ETHIOPIA															B	C			B			B		B	A			A							B	B				B				A	B	A	B	B	B	
GABON																B	A	E						B		A										C			D		B	B					B			
GAMBIA																	C													B	C		C			B	D					A	A							
GHANA																	B	D										B	B	B			A			B						B	A				B			
GUINEA																	C												B				D			B						A	C							
GUINEA-BISSAU																				E									C													B								
KENYA																			A				C	B	B		B	A						D	A					A				A	A	A		A	A	
LIBERIA																													C	C						D						B	B							
LIBYAN ARAB JAMAHIRIYA																	B	B				C														B			B						B		B			
MADAGASCAR																							B											A																
MALAWI																								D				B							A			C								B			A	
MALI																	A	A				B						B	C	B						A	B		B			A					A			
MAURITANIA																	B	D											D							B	A					A								
MAURITIUS																							E											A																
MAYOTTE (FRANCE)																							B											B				B								D				
MOROCCO																										E				B						B	B		C			B								
MOZAMBIQUE																																			C			A								A				
NAMIBIA																B																																		

LDCs / Passenger links to (by Region)	AFGHANISTAN	BANGLADESH	BHUTAN	CAMBODIA	LAO PEOPLE'S DEM. REP.	MALDIVES	MYANMAR	NEPAL	TIMOR-LESTE	KIRIBATI	SAMOA	SOLOMON ISLANDS	TUVALU	VANUATU	YEMEN	ANGOLA	BENIN	BURKINA FASO	BURUNDI	CAPE VERDE	CENTRAL AFRICAN REPUBLIC	CHAD	COMOROS	DEM. REP. OF THE CONGO	DJIBOUTI	EQUATORIAL GUINEA	ERITREA	ETHIOPIA	GAMBIA	GUINEA	GUINEA-BISSAU	LESOTHO	LIBERIA	MADAGASCAR	MALAWI	MALI	MAURITANIA	MOZAMBIQUE	NIGER	RWANDA	SAO TOME AND PRINCIPE	SENEGAL	SIERRA LEONE	SOMALIA	SUDAN	TANZANIA	TOGO	UGANDA	ZAMBIA	HAITI
NIGER																	C	B								E										B						B			C		C			
NIGERIA																	B					C		D				A	B	B			B			C			B			A	B		B		B	E		
REUNION (FRANCE)																							B											A																
RWANDA																			A									B																		D		B		
SAO TOME AND PRINCIPE																C				C																					A									
SENEGAL																	A	A		A									A	A	B		E			A	A		B			A	B				A			
SEYCHELLES						B																	E																											
SIERRA LEONE																													A	B			B			C						B						E		
SOMALIA																									A			A																A						
SOUTH AFRICA															C	B	B		E	A			E	A				B				A		B	A			A		B		A				A	C	B	A	
SUDAN															B						B	C	C				B	B											C						A					
SWAZILAND																																						B												
TANZANIA															C								A	C	E		E	A							B			A		E						A		A	E	
TOGO																	A	B								C		B		C						A			E			A								
TUNISIA																																				B	B					B								
UGANDA																									B		E	A												B			E			A		A		
ZAMBIA																								A				B							A											E			A	
ZIMBABWE																C								D				C							B			B								D			A	
NORTH AMERICA																																																		
CANADA											E																																							C
UNITED STATES		B									B									B								B	D													B	D							A
LATIN AMERICA & CARIBBEAN																																																		
BAHAMAS																																																		A
BRAZIL																C				C																														
CUBA																																																		C
DOMINICAN REPUBLIC																																																		A
FRENCH GUIANA																																																		B
GUADELOUPE (FRANCE)																																																		A
HAITI																																																		A
JAMAICA																																																		B
MARTINIQUE (FRANCE)																																																		A
MEXICO																																																		
NETHERLANDS ANTILLES																																																		B
PANAMA																																																		B
SURINAME																																																		E
TRINIDAD AND TOBAGO																																																		E
TURKS AND CAICOS (UK)																																																		A
Share of dark- and light-gray shaded countries (international only, %)	39	43	39	17	5	35	35	50	100	0	6	0	0	46	35	57	6	12	0	80	6	21	3	31	6	34	50	28	11	12	23	100	5	29	29	8	32	72	11	12	29	25	18	0	26	17	7	15	48	40

Sources: BACK Aviation Solutions OAG Database, IMF, World Bank, and WTO-OMT.

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APPENDIX B
Comparison of Existing EAS Schemes

States	Australia	European Union	United States
Name	**Remote Air Service Subsidy (RASS) scheme**	**Public Service Obligation (PSO) scheme**	**Essential Air Service (EAS) program**
Background	The Federal Government has been subsidizing remote air services since 1957, most recently through the RASS scheme that was established in 1983. Inter-State domestic markets were deregulated by the Federal Government in 1990, while some inter-State domestic markets are still regulated to a varying extent by State governments concerned (for example, New South Wales and Tasmania).	The Second Liberalization Package introduced the PSO scheme in 1990, allowing member States to provide some support for intra-EU international regional routes where market forces could not function adequately. In 1993, the PSO scheme was expanded by the Third Liberalization Package (Council Regulation No. 2408/92), and member States' existing domestic subsidy schemes were required to comply with the PSO procedure by the end of 1995.	The Federal Government had subsidized local-service carriers, if necessary, through the mail rate subsidy program since 1958. In 1978, when the Airline Deregulation Act was enacted, the EAS program was put into place, replacing the mail rate subsidy program by 1986. Although the EAS program was originally funded for a ten-year period, the Congress extended the period for another ten years in 1987, and removed the sunset date by the Rural Air Service Survival Act of 1996.
Objective	To ensure communities in remote and isolated areas have access to scheduled air services for the carriage of passengers and goods including mail, educational material, medical supplies, fresh food and urgent supplies.	To ensure the provision of a service satisfying fixed standards of continuity, regularity, capacity and pricing, which standards the airline would not assume if it were solely considering its commercial interest.	To guarantee that small communities that were served by certificated air carriers before deregulation continue to have access to the nation's air transport system.
Administrative body	The Department of Transport and Regional Services (DOTARS).	Each member State administers its own scheme, but has to observe Council Regulation No. 2408/92. The European Commission carries out an investigation upon request.	The Department of Transportation (DOT, in place of the Civil Aeronautics Board in 1985).
Applicability	Scheduled domestic passenger and cargo services (in most cases, deliveries of mail and educational materials).	Scheduled domestic and intra-European Economic Area (EEA) international services. Cargo services are not prevented by the Regulation, but in reality only passenger services have taken advantage of the scheme.	Scheduled domestic passenger services. The Federated States of Micronesia, the Marshall Islands and Palau have been covered separately.
Eligible routes or points	An eligible community must meet two fundamental requirements: a) there must be a demonstrated need for a weekly air service (there is a permanent population base but no existing air service; evidence of costs must be provided); and b) the community must be sufficiently remote in terms of surface travel time to a population center (beyond two hours) or neighboring community receiving a weekly transport service (beyond one hour).	An eligible route is one to an airport serving a peripheral or development region in the territory or a thin route to any regional airport in the territory, where airlines would not assume the adequate provision of scheduled air services satisfying fixed standards of continuity, regularity, capacity and pricing, if they were solely considering their commercial interest. Such route should be considered vital for the economic development of the region in which the airport is located.	Eligible points are communities receiving certified air service or listed on an air carrier's certificate in October 1978. Beginning in 1994, excluded are those within 70 driving miles of an FAA-designated medium or large hub airport or those receiving over a $200 subsidy per passenger (unless that community is over 210 driving miles from the nearest medium or large hub airport in the 48 contiguous states).
Service level requirement and specification	The operators are required to provide a scheduled weekly air service to the specified communities on the specified days of the week. They are responsible for the operation of the air service as a commercial undertaking, including setting fares and rates at levels aligned to other equivalent air services in remote regions.	The adequacy of scheduled air services shall be assessed by the member State having regard to: a) the public interest; b) the possibility, in particular for island regions, of having recourse to other forms of transport and their ability to meet the transport needs under consideration; c) the air fares and conditions which can be quoted to users; and d) the combined effect of all airlines operating or intending to operate on the route.	Communities that require subsidized service except those in Alaska are entitled to the following: a minimum of two round-trips per day, six days a week (five days until 1988); using 15-seat or larger pressurized aircraft that averaged more than 11 passenger enplanements a day from 1976 to 1986 (any size aircraft until 1988); and not more than one intermediate stop on each flight to an FAA-designated medium or large hub airport. In Alaska, communities are entitled to the number of flights provided in 1976 or two round-trips per week, whichever is greater, unless the affected community agrees otherwise. Flights must be provided at reasonable times taking into account the needs of passengers with connecting flights. The DOT may authorize a higher amount of service than the above minimum levels.

States	Australia	European Union	United States
Operational procedures	Communities rather than airlines apply or re-apply to be included in the scheme. Then, the operator to the community is selected through a competitive open tender process (often jointly with Australia Post). The selection is normally made simultaneously for all communities.	Before the introduction of the PSO, a member State shall consult with the other member States concerned and inform the European Commission (which shall publish the existence of this PSO) and airlines operating on the route. Once a PSO has been introduced, airlines can operate the route only if they meet the service requirements. If no airline is interested in operating the route, then the route can be restricted to one airline for up to three years (except where other forms of transport can ensure an adequate and uninterrupted service when the annual capacity exceeds 30 000 seats, and where another member States concerned proposes a satisfactory alternative means). The operator is selected from Community air carriers by public tender, either singly or for a group of such routes. The deadline for submission of tenders shall not be earlier than one month after the invitation to tender is published. The selection shall be made as soon as possible but after two months from the deadline.	If the last airline serving a community with or without a subsidy wishes to terminate, suspend, or reduce that service below the required level, it must first file a 90-day advance notice. During the notice period, any airline may propose to replace the incumbent on a subsidy-free basis. If a subsidy-free replacement airline cannot be found during the notice period, the DOT requires the incumbent to continue to provide a prescribed level of service, and solicits proposals for replacement service. The incumbent airline is held in pending completion of the carrier-selection case, and is eligible to receive compensation for its losses plus a profit element after the initial 90-day notice period is over.
Carrier selection criteria	Include the applicant's safety qualification, operational policy, business plan, budget, financial viability and operational ability.	Taking into account the adequacy of the service including the prices and conditions which can be quoted to users and, if any, the cost of the compensation required.	Include the applicant's ability to offer through ticketing and joint fares for connecting passengers, any codeshare relationship with a major partner, the experience in providing scheduled air service, the preference of the community, and the requested subsidy amounts.
Contract duration	The term depends on ongoing Government funding commitments to the scheme but would not normally exceed two years with an option to extend for up to two years.	For a period of up to three years, after which the situation shall be reviewed.	The term is subject to renewal generally every two years, at which time other airlines are permitted to submit proposals to serve that community with or without a subsidy.
Contract contents	The agreement with a selected airline specifies, *inter alia* , required services, operational technical requirements, subsidy amounts, and financial, statistical and performance reporting requirements.	The contract (as well as the invitation to tender) shall cover, *inter alia*, a) the standards required by the PSO; b) rules concerning amendment and termination of the contract, in particular to take account of unforeseeable changes; c) the period of validity of the contract; and d) penalties in the event of failure to comply with the contract.	The carrier selection order specifies the service pattern (routing, frequency and aircraft type), the exact subsidy rate, and the dates of effectiveness and termination of the rate.
Slot protection	Not applicable.	A member State may reserve certain slots at a fully coordinated airport when a PSO has been imposed on scheduled services on a domestic route to or from that airport in accordance with Council Regulation No. 95/93.	Whenever the DOT determines that slots are needed for operations to or from a designated high density traffic airport under the EAS program, those slots shall be provided to a selected airline under certain conditions.
Subsidy payments	The subsidy payment to a selected airline is made monthly in arrears. The subsidy amount is assessed as the expected shortfall between costs and revenues for the coming year with an allowance for a five per cent profit according to the agreed service levels (regardless of actual patronage and cargo carried).	A member State may reimburse a selected airline for satisfying standards required by a PSO. Such reimbursement shall take into account the costs and revenues generated by the service (i.e. calculated on the basis of the operating deficit incurred on the route concerned, including a reasonable remuneration for capital employed).	A subsidy is paid to a selected airline monthly on an after-the-fact basis after the airline has begun the service. The subsidy amount covers the difference between an airline's projected revenues and expenses with a profit element equal to five percent of total expenses.
Current scale of operations	Eight airlines serving about 250 remote communities in Queensland, the Northern Territory, South Australia, Tasmania (Bass Strait), and Western Australia.	Over 130 PSO routes throughout the EEA including Finland, France (representing about half of the PSO routes), Germany, Greece, Iceland, Ireland, Italy, Norway, Portugal, Spain, Sweden and the United Kingdom, but not all of them with subsidies, some having market protection only.	About 100 communities in the contiguous 48 states and Hawaii as well as 35 in Alaska receive EAS services operated mainly by commuter airlines.

States	Australia	European Union	United States
Budget	A fixed annual budget as determined in the Federal budget (for example, A$1.2 million in 1999-2000, A$2.5 million in 2000-01, A$2.2 million in 2001-02, A$3.2 million in 2002-03, A$3.3 million in 2004-05).	Up to each member State, for example, a central budget, a budget of local/regional entities (which directly benefit from the PSO), or a national-local mixed fund system.	A $50 million annual budget has been guaranteed since FY 1998 with an additional $15 million subject to conditions since FY 2001 (before that, a budget had ranged from about $100 million early in the program down to about $25 million in mid-1990s). The terrorists attacks of September 11 greatly increased the demands on the EAS program, as airlines' revenues went way down while expenses increased. As a result, for FYs 2002-2005, the program was funded at $113 million, $113 million, $102 million and $102 million, respectively.
Supplementary measures and other schemes	a) Australia Post has responsibility for the delivery of mail and has separate contracts with several RASS air operators for this purpose (A$0.35). b) The State Governments of Queensland and South Australia each subsidizes regional airlines serving the specific remote routes.	a) Council Regulation No. 2408/92 also allows each member State, where the airline licensed by it has started a scheduled passenger service with aircraft of no more than 80 seats on a new route between regional airports where the annual capacity does not exceed 30 000 seats, to refuse another airline's entry for two years subject to certain conditions. b) The Route Development Funds (RDFs) were established in Scotland in 2002, Northern Ireland in 2003 and the Northwest region of England in 2004 by the public-private partnerships (PPPs) between local governments and private businesses. The aim of RDFs is to promote the development of new air routes primarily to Continental Europe (in some cases also to intercontinental destinations), through the provision of investment support for local airports to reduce landing charges for airlines selected and targeted new routes.	a) The Small Community Air Service Development Program was introduced in 2000 and extended in 2003. Subject to funding from Congress, the DOT may each year award a total of about $20-35 million grant-in-aid financial assistance directly to a maximum of 40 communities served by an airport that is not larger than a small hub airport with insufficient air services or unreasonably high air fares. Priority is given to those communities, *inter alia*, where air fares are higher than the national average; a portion of the cost of the activity contemplated by the community is provided from local non-airport-revenue sources; and a PPP is established to facilitate air service. Grant funds can be used, for example, for financial incentives (including subsidies and revenue guarantees) to airlines and to cover the expense of new promotional activities related to improving air services. Communities may not receive grants for the same project more than once; therefore, there is no ongoing obligation to a project beyond a term of typically a few years. b) Many State governments have their own assistance programs and funds for regional air services.
	c) Some member State including France, Portugal and Spain have given aid of a social character to specific categories of passengers travelling on the route, like those with low income and those with reduced mobility. In the case of underprivileged regions like remote islands, the aid may cover the entire population of the region in question.		

Sources:
* Australian DOTARS Web site (http://www.dotars.gov.au/transprog/aviation/air_service_subsidy/)
* Australian Bureau of Transport and Regional Economics (2003, *ibid*, see footnote 9)
* Council Regulation (EEC) No 2408/92 of 23 July 1992 on Access for Community Air Carriers to Intra-Community Air Routes (*OJ* L 240, 24.08.1992, http://europa.eu.int/smartapi/cgi/sga_doc?smartapi!celexplus!prod!CELEXnumdoc&lg=en&numdoc=392R2408)
* Council Regulation (EEC) No 95/93 of 18 January 1993 on Common Rules for the Allocation of Slots at Community Airports (*OJ* L 014, 22.01.1993, http://europa.eu.int/smartapi/cgi/sga_doc?smartapi!celexplus!prod!CELEXnumdoc&lg=en&numdoc=393R0095)
* Application of Articles 92 and 93 of the EC Treaty and Article 61 of the EEA Agreement to State Aids in the Aviation Sector (OJ C 350, 10.12.1994, http://europa.eu.int/comm/competition/state_aid/legislation/94c350_en.html)
* U.K. Civil Aviation Authority (2005, *ibid*, see footnote 9)
* Cranfield University Air Transport Group (2002, *ibid*, see footnote 9)
* U.S. DOT Web site (http://ostpxweb.dot.gov/aviation/X-50%20Role_files/essentialairservice.htm, http://ostpxweb.dot.gov/aviation/X-50%20Role_files/smallcommunity.htm)
* U.S. General Accounting Office (2000, 2002, *ibid*, see footnote 9)

Note: Detailed information on other schemes as well as proposed schemes may be found in:
* Transports Québec Web site (http://www1.mtq.gouv.qc.ca/fr/services/programmes/c4.asp)
* Regulation No. 24/2002/CM/WAEMU Setting the Conditions for Access by WAEMU Air Carriers to Services within the Community of 18 November 2002 (*Les Bulletins Officiels de l'UEMOA*, http://www.izf.net/izf/Documentation/JournalOfficiel/AfriqueOuest/2002/REG24_2002.htm)
* Tongan Ministry of Civil Aviation (2004), *Domestic Civil Aviation Policy Advice Paper* (*DCAPAP*, http://mca.gov.to/files/policy_advice_paper.pdf)
* Indian Ministry of Civil Aviation (2003), *Report of the Committee on a Road Map for the Civil Aviation Sector* (http://civilaviation.nic.in/moca/nccommitteereport.pdf)
* Pacific Islands Forum Secretariat (2003), *Alternative Approaches to Assured Services*, PIFS(03)FAPV.07, Fourth Aviation Policy Meeti

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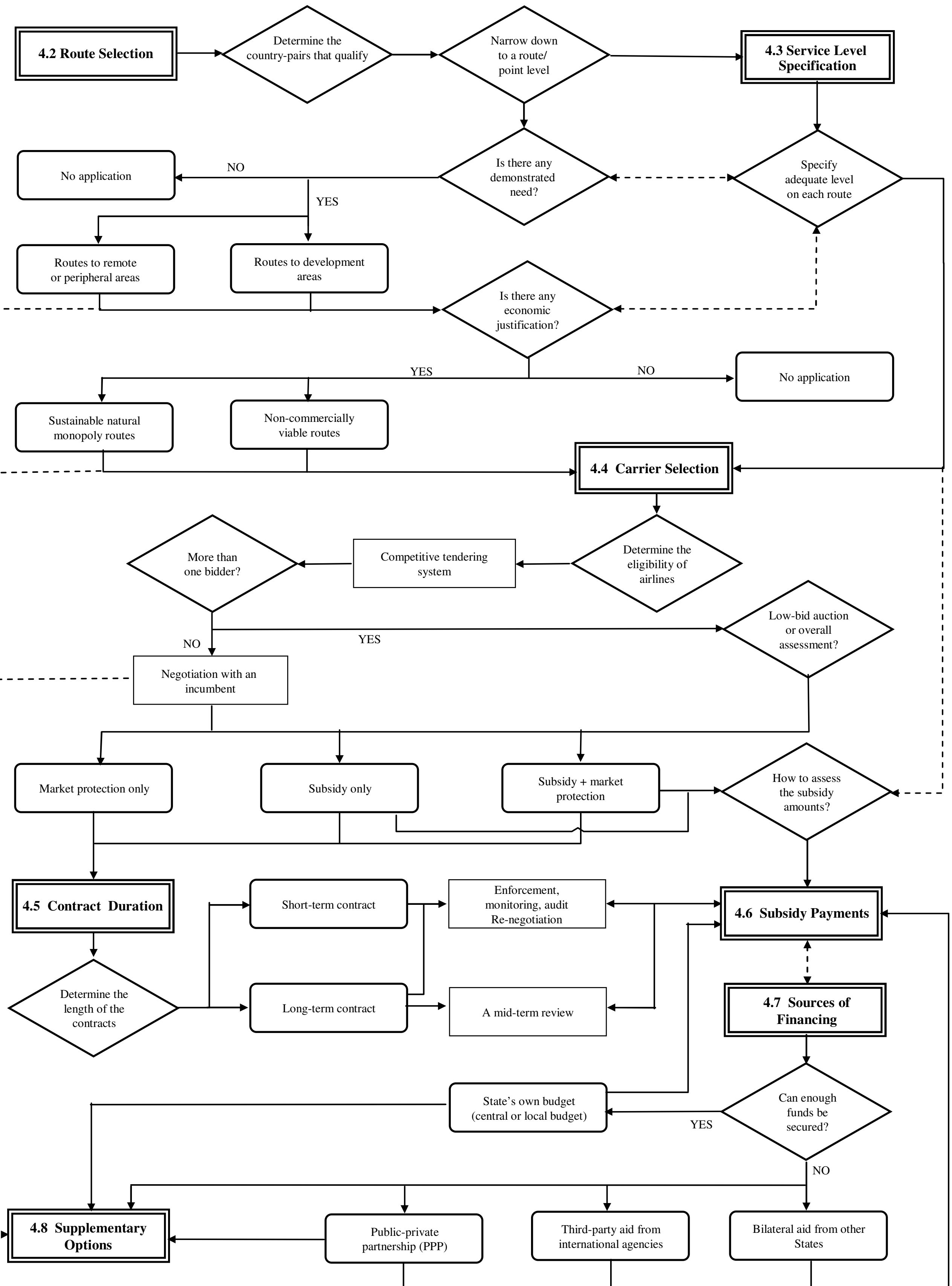
APPENDIX C. Establishment of an ESTDR Scheme Flow Chart



Note: A solid line and a broken line indicate a direct and indirect link between steps, respectively.

— END —