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**PROGRESS MADE IN THE IMPLEMENTATION OF THE
WORK PROGRAMME**

REGIONAL TRANSPORT DEVELOPMENT STRATEGY

Note by the Secretariat

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INTRODUCTION

1. A programme element, entitled "Economic aspects and planning of integrated transport in Western Asia", was initiated as a component of the "Development of integrated transport" subprogramme included in the ESCWA Programme of Work and Priorities for 1984-1985.
2. One of the main activities within the framework of the programme element has been the formulation of an integrated transport development strategy for the ESCWA region. The result of the work carried out in this field during 1984-1985 and finalized in the second half of 1985 was the publication of a study on "Strategy for the Development of Integrated Transport in Western Asia" (E/ESCWA/TCT/85/9).
3. The present report submitted to the Commission in accordance with the 1986-1987 ESCWA Transport programme is based on the above-mentioned study.

I. FOUNDATIONS OF THE STRATEGY

4. At the regional level, the foundation of the regional transport strategy is the common historical, socio-cultural heritage uniting the ESCWA countries as part of the Arab nation, moving towards greater economic, social and cultural integration. All countries in the region have, in fact, realized the necessity of joint action for transport development. The strategy aims at contributing to the achievement of regional aspirations and objectives in the transport sector.
5. At the international level, the strategy is founded on principles adopted by the United Nations and its various bodies, in particular the Economic and Social Council and the regional economic and social commissions, in their declarations, work plans, programmes and resolutions aimed at promoting international co-operation in the field of transport. The elements of the ESCWA transport strategy are also based on the principles regarding intraregional and Arab co-operation laid down by Arab organizations such as the League of Arab States and its specialized agencies and the economic and social development funds. Within this international framework, particular attention has been given to General Assembly resolution 35/56 of 5 December 1980, entitled the "International Development Strategy for the Third United Nations Development Decade", in particular the development objectives for the transport sector, and General Assembly resolution 36/194 of 17 December 1981, entitled "United Nations Conference on the Least Developed Countries", regarding the Substantial New Programme of Action for the 1980s for the Least Developed Countries, in particular the section relevant to the improvement of the transport infrastructure.

II. GENERAL FRAMEWORK OF THE STRATEGY

6. The proposed strategy for the development of integrated transport in the ESCWA region is formulated according to the following three major approaches: (a) Regional transport problems; (b) Present transport strategies at the international, regional and national levels; and (c) Future transport development prospects and trends.

7. The study on the regional transport development strategy encompasses, on the basis of these main approaches, the analysis of the present transport infrastructure, strategies, policies and plans at the ESCWA regional level, examines future development prospects and principal policy issues to be tackled by the regional strategy, discusses strategy objectives and policies and proposes recommendations which would enable the initial planning and implementation of the proposed strategy.

III. PRESENT TRANSPORT INFRASTRUCTURE AT THE ESCWA REGIONAL LEVEL

8. During the past decade the ESCWA region's transport infrastructure underwent massive restructuration and improvement. Since the highest priority was given to highway construction and road transport development in various ESCWA countries, rail transport did not experience concrete new developments at the regional or sub-regional levels as yet. The use of the port development schemes needs to be better analysed. Particularly impressive in the Gulf region, merchant fleet development in the region is one of the fastest developing in the world and shows high rates of increase, particularly in oil tanker fleets. However, the percentage shares of ESCWA countries in world bulk carrier, container and oil tanker fleets are still very low.

9. Recently developed road networks, providing alternative modes of transport, have taken a large share of coastal shipping traffic in various ESCWA subregions; thus coastal shipping has a small share of the traffic. Moreover, inland water transport has not been able to reach a stage of development which would allow the river transit trade to grow in the Nile Valley or in the northern ESCWA subregion.

10. In the air transport sector, despite large investments in airport construction, some parts of the region are still not well connected to other ESCWA centres and neither inter-city passenger transport nor integrated regional domestic airline systems are available.

11. Although new pipelines from Iraq to Turkey and Saudi Arabia link the oil fields of the north-eastern ESCWA region to the Mediterranean and the Red Sea, combined strategies for pipelines and tanker fleets of the ESCWA countries have not been formulated. This lack of a basic approach, together with the incomplete state of the transport services and facilities, hinders rapid and

steady development of both intraregional and interregional transport sector activities in various modes. Furthermore, ESCWA regional transport systems do not yet have appropriate linkages and facilitation procedures taking into consideration the interregional context. However, some new developments such as the Cairo-Nuweiba road and its link to Aqaba with regular ferry boat services connecting Cairo to Amman should be mentioned as an excellent example of interregional and intraregional co-operation.

IV. PRESENT TRANSPORT STRATEGIES, POLICIES AND PLANS

12. There are a large number of existing international and regional (Arab) strategies directly or indirectly related to transport development issues which must be taken into account in the implementation of ESCWA regional transport development strategy. The ESCWA strategy, international strategies in general and Arab regional strategies and subregional policies such as the Gulf Co-operation Council's approach) in particular should lead to closer co-ordination and co-operation at the ESCWA regional level.

13. At present the United Nations and Arab organizations are the two main international "sources" for strategies relevant to transport developments in Western Asia. United Nations resolutions, taking into consideration international long-term trends in socio-economic and technological development, contain basic strategies and policies for transport development. Closer examination of the United Nations resolutions, programmes and documents provides a better understanding of the goals, objectives and policy measures which the international community has adopted in the global development strategies. International transport, considered one of the major activities in the worldwide development process, retains a prominent place in each global strategy approach. In this context the proclamation of regional transport decades, in Africa from 1978-1988 and in Asia and the Pacific (including the ESCWA region) from 1985-1994 is the most eloquent demonstrations of the interest shown by the world community towards transport issues.

14. For the ESCWA member countries, an effective transport system is an essential element of socio-economic development, an instrument for trade and for exchange of goods and a prerequisite for rural development, as well as for the exploration of their natural resources and for the establishment of industrial plants. ESCWA countries, while developing their nation-wide transport systems with adequate infrastructural, operational and institutional facilities, have to take into consideration the regional and global context announced in international and regional Arab transport strategies. In other words, national transport strategies, policies and plans should be based upon global strategies.

15. Various national transport studies, master plans, sectoral surveys and programmes undertaken in various ESCWA member States could easily constitute a

basis for subregional and regional transport master plans. As suggested in the study on the transport development strategy, the establishment of appropriate co-ordination and planning units, as well as high-level policy - and decision-making bodies, would enable the ESCWA region to implement an integrated transport development strategy and policies based on the regional transport master plan.

16. National transport strategies, policies and plans formulated and implemented in ESCWA member countries generally reflect the main characteristics of regional strategies. Moreover, in cases of intraregional, multi-or bilateral transport projects, national transport planning follows, even more closely, the proposals and recommendations of regional Arab strategies.

17. Transport development strategies conducted in ESCWA countries are an integral part of their national planning exercise. Almost without exception, all ESCWA member States are implementing five-year medium-term development plans and short-term annual programmes. Within the framework of current five-year development plans, covering the same years in most ESCWA countries, the transport sector has a relatively high priority.

18. The bases of national transport development plans are strategies and policies laid down by the policy-making and planning authorities. In various ESCWA countries this strategic and policy-based background is the result of national transport studies, master plans or sectorial studies and programmes.

V. FUTURE TRANSPORT DEVELOPMENT PROSPECTS IN THE ESCWA REGION

19. In this respect, the findings of the study on transport development strategy emphasize, besides the future modal trends, the issues connected with the transport technologies. The development of "intermediate technology" in the ESCWA region itself and the transfer of "appropriate technology" to Western Asia are the key concerns discussed. It is expected that the development of appropriate technology and its transfer will become more complex in the future. The incentive provided by profit-sharing is no longer sufficient; the creation of more joint ventures between ESCWA countries and other world regions, based upon know-how and technical expertise together with technological transfer and trained manpower, will be essential.

20. The results of the study on regional transport strategy suggest that future trends in international transport developments will also cover data-processing spheres, achieving rationality in the transport system in terms of organization and operation, and widening the field of vision with respect to transport problems in two directions: (a) Transport policy issues dealing mainly with State finances, employment and labour, protection of the environment and energy; and (b) A broader geographical approach involving

larger, intraregional transport issues, looking beyond customary traditional boundaries.

21. Future transport development prospects, in particular new technologies to be introduced, will certainly have important financial, economic and social implications and the ESCWA countries should be informed of the advantages and disadvantages that can be derived from them. In this respect, transport policy-makers, as well as transport managers and users, must become increasingly aware of and informed about transport development prospects and trends.

22. Moreover, since investments in transport are heavy and take a long time to bear fruit, and since transport operations are costly and complicated, it is essential that they should not be narrowly subordinated to the immediate market situation, but should be based on a sound assessment of future prospects.

23. Future development trends and prospects are also closely connected with transport management, operations, training and distribution systems. Moreover, future characteristics of interregional trade flows and other "demand creators" will also affect ESCWA regional transport development trends.

VI. GENERAL ISSUES IN THE ESCWA REGIONAL TRANSPORT STRATEGY

24. One of the first aims of a regional ESCWA strategy for transport development would be to resolve the main transport sector's problems and to eliminate major shortcomings, obstacles and difficulties hindering the smooth movement of persons and goods within and to the region. Such a strategy should also focus on the development and improvement of transport infrastructure and operations, thus enabling a well-balanced expansion of transport networks within the ESCWA region as well as ensuring the improvement of their links to the other regions of the world.

25. The problems and the policy issues to be tackled by the transport development strategy are not only structural, but also the result of combined circumstances originating from the socio-economic, political, historical and cultural background of the region. They are related to present and future availability, allocation, development and utilization of resources which are, or will be, made available for transport development. Therefore, the policy-and problem-oriented approach to the transport development strategy in the ESCWA region covers various problem areas related to resource availability, allocation and utilization. These areas are interrelated. Problems should be eliminated through appropriate actions covering common regional features of all the difficulties and constraints as well as following a multidimensional transport development strategy.

26. The first and basic policy issue concerns the availability of resources on which transport development strategy should be based. The countries in the ESCWA region have considerably greater variety in resource endowments. The regional transport strategy would aim at making rational use of four types of resources: capital, energy, land and manpower.

27. Capital and energy resources are largely available in the ESCWA region, in particular in oil-producing countries. ESCWA transport strategy could easily rely on regional financial and natural resources. Even non-oil ESCWA economies (Jordan, Lebanon) or least developed ESCWA member countries (People's Democratic Republic of Yemen and the Yemen Arab Republic) are using and receiving some regional funds for developing their transportation infrastructure and operations, including their energy supplies.

28. Other issues related to financial resources availability concern mostly the encouragement and guidance given to the private sector's transport investments which should include specific financial rules and regulations according to the priorities and requirements of the transport strategies.

29. Furthermore, financial resources provided by the public sector, or by regional financial resources through regular government budgets or through Arab funds are not always handled according to an appropriate project preparation and evaluation process in the transportation sectors.

30. Problems connected with the availability of land for transport infrastructure development concern mainly land-use planning issues. Sufficient attention has often not been given to the transportation sector in the preparation of land-use programmes at various ESCWA regional and subregional levels. Adequate analysis and planning of land resources would lead to a better balanced transport development whereby any possible conflicting land-use, disfigurement of the landscape and environmental damage could be avoided.

31. The statistical data on the labour sector suggest that there is enough manpower available for transportation sector activities in the ESCWA region. However, this general statement is not necessarily valid for every individual country. Owing to the large amount of "labour mobility" in the ESCWA region and because of the lack of available manpower statistics at the sectoral level, a detailed analysis of manpower resources cannot be undertaken.

32. An assessment of manpower resources covering all the ESCWA region is badly needed: the surveying of the manpower needs in each transportation subsector, including modal-split analysis, would provide a better picture regarding the availability of regional manpower resources for the sector.

33. A World Bank study published in 1983 covering 19 Middle East and North African countries (including all 13 ESCWA member countries) indicates that the total labour requirement for 1985 in the transport and communications sector would be 5.1 per cent of the total labour requirements. The other main sectors considered in this study are agriculture (35 per cent), services (23 per cent) and manufacturing (13 per cent), construction (10.7 per cent) and trade-finance (10.3 per cent). This reasonably moderate manpower requirement in the transport sector shows that the real manpower problem lies in

development and training rather than in availability at the ESCWA regional level.

34. Problem areas and strategy issues in the field of resource allocation for the transportation sector are closely associated with transport planning. Although various noteworthy attempts were made to prepare national transport master plans and studies in various ESCWA member countries, the region as a whole still lacks comprehensive transport planning.

35. To overcome various allocation problems at the regional level, ESCWA member States should co-ordinate their efforts to initiate and formulate a regional integrated transport plan. Such a plan, besides providing guidance for intraregional and interregional transport development schemes and policies, would allow member countries to concentrate their resources in a joint fashion and to allocate common regional resources for the benefit of regional transportation systems.

36. In the transport sector in particular, a planning exercise at the regional level is of great relevance to any national transport study or plan and the absence of a completed regional transport study must be regarded as a bottleneck in the transport planning of individual countries. For instance, plans for improvement in the international transport networks will have little effect if the national infrastructures in each member country are not adequately planned. In the same context, for port development schemes it is often beneficial to reach a regional planning level allowing functional classification and co-ordination in order to avoid overcapacity and harmful competition.

37. There are well-established and well-known basic steps in transport master plan preparation which are valid for the ESCWA region as well. Within this context, after the identification of the objectives and the formulation of the general strategy, the first step would be the preparation of a transport inventory surveying the existing transportation system. Analysis of the traffic flow, traffic counts, surveying of the characteristics of the infrastructure and facilities, their present conditions and utilization (load factor), as well as assessment of the cost structure of different transport modes (to users, to carriers and to the public authorities) are to be considered within this first step.

38. Traffic forecasting, forecasting of transport needs, with the help of input-output analysis and transport models, constitute the second step which would include the following: volume and location of various sectoral outputs and their consumption, population trends, trade flows, traffic volume, freight flow forecasts, passenger flow forecasts and flows by traffic origin-destination (O-D), as well as the distribution of traffic to each transport mode (model split-assumptions and analysis).

39. The next step in the ESCWA region transport planning exercise would be the investment programming based on cost/benefit analysis and feasibility studies, project preparation and appraisal methods. Recommended regional investment planning should include expansion, replacement, rehabilitation, maintenance and modernization of transport infrastructure, underlining

intermodal priorities, financing and timing of investments. Spatial distribution (land-use) of the transport sector's investments should also be included in this planning phase.

40. The last step would cover the recommended transport sector policies would make possible the implementation of the proposed transport master plan at the ESCWA regional level.

41. Resources allocation undertaken according to the above indicated planning methodology should also overcome the integration problems which may arise during the plan-preparation and implementation stages. In fact, transport planning should lead to sectorial and spatial integration of the transportation sector in the ESCWA regional development process. The transport system is, by definition, closely linked to all the other socio-economic sectors. Within the framework of overall development planning, transport should be fully integrated into the other sectors. The same approach is also valid in the field of land-use or physical planning: the regional transport planning exercise should guide regional land-use decisions, thus diminishing the competing land-use claims originating from various sectors.

42. The most important facets of the strategy issues connected with development and use of resources for the transport system concern manpower development, as well as the transport infrastructure, its organization and operations.

43. In the ESCWA region, the development of human resources for transport sector activities is a major problem. Mainly because of the fast technological progress achieved in the transport sector, skilled manpower requirements at the regional level are rapidly increasing. Thus, training is the main issue to be resolved at various levels.

44. The utilization of manpower resources at the regional level must also be assessed in the light of labour migration in Western Asia. Recent studies on this topic suggest that many ESCWA countries are becoming labour exporting and importing at the same time. The pattern of migration in various sectors, including transport and communications, is also changing according to the regional socio-economic and technological development process. For example, against an overall growth rate in all sectors of 20.7 per cent in the total labour requirements of 19 Middle East and North African countries (including 13 ESCWA countries) for the period 1975-1985, a 40.5 to 53.2 per cent increase is expected in the transport and communications sector.

VII. OBJECTIVES AND POLICIES OF THE ESCWA REGIONAL TRANSPORT DEVELOPMENT STRATEGY

45. The principal objectives of the transport development strategy in Western Asia are:

(a) Improvement of transport infrastructures, institutions and operations in the ESCWA member countries;

(b) Promotion and improvement of effective and efficient transport networks integrating all modes and means of transport and in particular the development of intraregional and interregional transport linkages;

(c) Establishment of effective co-ordination and co-operation at intraregional, interregional and international levels, in order to secure the smooth flow of transport through Western Asia, in particular through regional actions, measures and conventions.

46. Objective-oriented policy actions, which should be foreseen and implemented by the regional and national transport organizations as an integral part of the regional transport development strategy, can be summarized as follows: regional transport facilitation by means of international and regional conventions on transport and related issues; use of new concepts in transport planning at the ESCWA regional level; introduction of adequate transport information systems; regional regulatory measures in the field of transport; development of manpower resources and training; formulation of appropriate pricing policies and improvement of institutional and co-ordinating arrangements.

47. Besides the above indicated measures and actions, government transport policies conducted in ESCWA member States includes four main spheres of influence and should also be applied within the framework of the ESCWA regional transport development strategy. These spheres are: (a) control of quality; (b) Control of quantity; (c) control of the organization of the transport sector; and (d) control of resource allocation. The instruments utilized as part of the policy to be carried out by public authorities would obviously vary according to the regional and subregional needs and realities.

48. Within the framework of transport development policies, lack of an appropriate approach vis-a-vis international transport infrastructure investments may also create serious problems in regional transport development in the ESCWA region. Infrastructural projects of an international character in the field of transport are those projects which involve international trade or the movement of both domestic and foreign passengers. In evaluating the economic justification of a transportation investment with an international or regional character, a national viewpoint is not sufficient. It is therefore necessary to develop adequate evaluation systems and methods at the ESCWA regional level, enabling a better match between supply and demand within the regional transport systems.

49. Demand for transportation is a derived demand arising as a substitute for or complement to the demand for something else. Because it is derived from the general level of economic activity that produces the goods and services for which transportation is required, in the short run and with a given technology, overall demand for transport is relatively inelastic. Lower transport costs can act as a stimulus to the economy also at the regional level. Moreover, the relationship between transport costs and market prices (subject also to exchange rates) of selected products must be fully analysed to determine the adjusted demand and supply structures and related route options: choices of optimum routing and transport infrastructure investments

at regional levels can only be undertaken on this basis. The identification and measurement of impacts due to changes in transportation supply and demand and routing are the central issues of concern in regional transportation systems evaluation.

50. It is also appropriate to take into consideration the distribution of costs and benefits between intraregional and extraregional economies while evaluating international transit transport investment projects.

51. Complementary and competing transport modes in the ESCWA region constitute another important policy issue. The complementary and competing nature of various transport modes must be fully taken into account in any regional approach to develop the present transportation system.

52. Besides the "classical" competition between road and rail or land and sea transport there are various other competing combinations such as road versus river transportation, coastal shipping versus coastal roads or pipeline transportation competing with tankers and with rail and roads.

53. The complementary aspects of transport modes at the regional level are best illustrated by a multimodal transport approach. By its own definition international (ESCWA regional) multimodal transport is the carriage of a consignment of goods from one country to another by more than one mode of transport, on the basis of one contract used by one single multimodal transport operator, who assumes full responsibility for the execution of the contract. The backbone of international multimodal transport is unitization, especially containerization.

54. To avoid possible problems which may arise while introducing or developing multimodal transport policies in the ESCWA region, member countries should consider the benefits and costs of investments in new technologies in multimodal transport operations from the point of view of the operators, the shippers and their economies. In the same context, when contemplating the introduction of multimodal transport, countries concerned should also assess whether the total volume of their international trade likely to be moved by container will be adequate to ensure full utilization of the necessary facilities and whether there will be sufficient cargo, both incoming and outgoing, for multimodal transport.

55. In identifying possible policy measures and actions to be considered within the ESCWA regional transport strategy, some emphasis must also be put on urban and rural transportation sectors. As these issues are more the main concern of urban and rural development sectors and policies, the proposed ESCWA regional transport development strategy mentions transport problems in urban and rural areas from an overall point of view and indicates that ESCWA member countries should give due consideration to urban and rural transportation issues within their urban and rural development planning.

VIII. STRATEGY RECOMMENDATIONS

56. Transport development strategy in Western Asia proposes the following recommendations which could facilitate the initial planning and implementation of the proposed strategy:

(a) ESCWA member States should take steps necessary to establish regional committees, units and advisory bodies to formulate, prepare and adopt common transport planning methodologies and regional transport studies leading to a regional transport master plan. First steps towards this direction would be the establishment of an ESCWA Transport Committee and the organization of regular meetings of the ESCWA countries' Planning and Transport Ministers;

(b) The countries in the ESCWA region, while formulating, planning and implementing their own national transport policies, should always bear in mind the intraregional and interregional implications of their policy decisions and should seek maximum integration, co-ordination and co-operation within the ESCWA region;

(c) In order to implement the policies of the regional transport development strategy, ESCWA countries should establish or activate the regional funds. Availability of the regional financial resources for transport development schemes and investments is essential; this "self-sufficiency" component within the framework of joint regional investment programmes and ventures should be further promoted and utilized;

(d) ESCWA member States should establish and promote regional (multinational) transport companies and operations. In this field, priority could be mainly given to containerization, road transport, shipping enterprises and air transport;

(e) For the optimum implementation of the ESCWA transport development strategy, countries in Western Asia should formulate, co-ordinate and implement joint policy measures, in particular regarding pricing, taxation and environmental and safety regulations;

(f) Interregional transport development and operations are often adversely affected by the absence of facilitation procedures related to documentation and insurance requirements, customs, immigration and safety and security procedures at border-crossings (air, sea and land). Therefore, transport facilitation aspects should be emphasized with regard to all existing modes of transport and made an integral part of the strategy implementation. Consideration should be given to these aspects by the ESCWA member countries adhering and to implementing multilateral and regional transport conventions and treaties relevant to the region;

(g) Manpower and training policies conceived and conducted by the ESCWA countries should include regional approaches aimed at developing regional training programmes, institutions and other manpower development schemes. The ESCWA region should give careful consideration to regional manpower mobility issues which could imply both negative and positive aspects for the whole area;

(h) The drawing up of a regional master plan, based upon the regional strategy for the development of integrated transport in Western Asia, will require adequate studies and research based on up-to-date and reliable data and information. Therefore, ESCWA countries, through existing and future organizations, planning units and regional co-ordination bodies, should establish appropriate transport information systems at the regional level.