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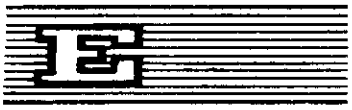

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GLOBAL STRATEGY FOR THE IMPLEMENTATION OF THE UNITED NATIONS TRANSPORT AND COMMUNICATIONS DECADE IN AFRICA (1978-1988)

M79-1308

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UNITED NATIONS TRANSPORT AND COMMUNICATIONS DECADE IN AFRICA: 1978-1988

A. BACKGROUND

1. In accordance with Article II of Chapter 2 of the charter of the Organization of African Unity adopted at the first OAU meeting held in Addis Ababa, May 1963 it is stipulated that member States shall co-ordinate their general policies in Economic Co-operation especially in the field of transport and communications.

Considering that in June 1973 the Heads of State and Government of the Organization of African Unity (OAU) at the tenth OAU summit meeting was adopted an "African declaration on co-operation, development and economic growth", which among other things calls for the development of transport and communications infrastructures in Africa to achieve the economic integration of the continent and the establishment of an African Common Market.

A few months later, in September 1973, the non-aligned countries adopted at their summit meeting in Algiers an "Economic Declaration" and a "Programme of action for economic co-operation" which called for a complete reorganization of the international economic system.

2. In May 1974, on the occasion of the Sixth Extraordinary Session of the United Nations General Assembly, the first one to deal with economic problems, two resolutions were passed: one is entitled "Declaration for the establishment of a new international economic order", and the other "Programme of action for a new international economic order". They were to constitute, with a third resolution "Development and international economic co-operation" passed in 1975 at the seventh extraordinary session, the basic documents of the new international economic order.

Indeed, as early as June 1974 the eleventh summit meeting of OAU held at Mogadiscio adopted specific resolutions on co-operation and co-ordination between the transport systems in Africa with a view to the integration of all the African transport systems.

3. The ECA Conference of Ministers in Kinshasa (24 February - 3 March 1977), determined to do all within its power to give decisive impetus to the development of the African continent and to the establishment of a new international economic order; and aware of the difficulties and the considerable backwardness experienced in Africa in the transport and communications sector, and bearing in mind the work of the Paris Conference on International Economic Co-operation, adopted resolution 291 (XIII) on the Transport and Communications Decade in Africa for the years 1978-1988.

4. Resolution 291 (XIII) recommends that the international community, the Paris Conference on International Economic Co-operation and the relevant United Nations bodies should proclaim a Transport and Communications Decade in Africa covering the years 1978-1988.

Continuing the efforts of the ECA Conference of Ministers, the Economic and Social Council, at its sixty-third session, adopted resolution 2097 (LXIII) endorsing resolution 291 (XIII).

Finally, the United Nations General Assembly, during its thirty-second session, adopted resolution 32/160 endorsing the recommendations set out in paragraph 1 of resolution 291 (XIII), and proclaiming the Transport and Communications Decade for Africa: 1978-1988.

The three resolutions mentioned above set out and support a dual recommendation:

- proposal of, and active support for, a global strategy for the development of transport and communications for the whole of the continent, with the major concerns of harmonization, co-ordination, modernization and development;

- mobilization of the technical and financial resources required for that purpose.

5. Within that framework the United Nations Economic Commission for Africa plans:

- to define the basis and the constituent elements of a strategy for the establishment of an integrated transport and communications network for Africa;

- to prepare the development programmes and plans concerning each mode of transport and communications for Africa, focusing on the key sectors of industry, agriculture, trade, with a view to their development during the Decade 1978-1983; the studies as a whole dealing with the following fields:

  - road transport
  - sea and river transport
  - air transport
  - rail transport
  - multimodal transport
  - pipe lines transport
  - communications: telecommunications, radio, television and postal services.

B. GENERAL STRATEGY OF THE UNITED NATIONS TRANSPORT AND COMMUNICATIONS DECADE IN AFRICA

I. Definition of strategy

6. The principal goal of the strategy must be the independence, the self-reliance and the international co-operation of the African States in the field of transport and communications.

For this purpose the strategy of the Decade must pursue the following over-all objectives.

a) Promote the integration of the transport and communications infrastructures with a view to increasing inter-African trade.

b) Ensure the co-ordination of the various transport systems in order to increase their efficiency.

c) "Unlock" the land-locked countries and the isolated regions.

d) Harmonize the national regulations and reduce to a minimum the physical and non-physical barriers with the aim of facilitating the circulation of persons and goods.

e) Stimulate the use of local human and material resources, the standardization of the networks and of the equipment, research and dissemination of techniques adapted to the African context in the building of transport and communications infrastructures.

f) Promote an African industry in the field of transport and communications equipment.

g) Mobilize technical and financial resources during the Decade with a view to promoting the development and modernization of the transport and communications infrastructures in Africa.

7. Consequently, the first task is to define the over-all sectoral and sub-sectoral objectives of the United Nations Transport and Communications Decade in Africa, taking into account that the choice of the mode of transport should follow the principle of maximum social profitability to the economy as a whole, formulate strategy which properly reflects the principles of the New International Economic Order, and assess the resources necessary to implement programmes of the Decade in Africa.

8. These objectives must be reflected in each of the modes of transport (road, rail, maritime, inland water and air ...) and communications (telecommunications, radio, television, post) in the adoption of a strategy followed by concrete activities to be carried out in a co-ordinated manner to achieve the objectives laid down. This strategy must, in each of the subsectors mentioned above, concern (i) the training of administrative and technical staff, (ii) the establishment of transport and communications infrastructure, (iii) the establishment of national transport and communications industries, (iv) the adoption of appropriate and harmonized legislation, particularly in the field of international transport, including legislation for facilitation of movement of passengers and cargo, and environmental protection, (v) the establishment and/or development of policy centres for the development of transport and communications, and (vi) the creation of a co-ordinating mechanism and information system for monitoring the implementation of the strategy in the various subsectors.

9. The order of priority in the implementation of the Decade plan is as follows:

a) - regional projects
   - subregional projects
   - national projects with a regional or subregional implication

b) - project of the least developed, landlocked and newly independent countries and island countries, front line States

c) - projects of other countries.

It should be noted that, for these to be real international co-operation, a high degree of priority should be accorded to subregional complementarity in the economic field.

The above orders of priority will, if necessary, be reviewed, depending on the results of the first phase.

10. - The phases of implementation of the Decade plan are defined as follows:

Phase I: duration - four years

- continuation of the implementation of on-going projects
- implementation of projects already identified and studied and which are only waiting to be financed
- identification of technical feasibility and economic studies of other projects and search for their sources of financing.

Phase II: duration - six years

- continuation of the implementation of projects undertaken in the course of the first phase
- financing and implementation of new projects
- continuation and identification of other new projects.

II. Mechanism for implementation of the Decade

11. In order to ensure the proper and successful implementation of the United Nations Transport and Communications Decade it will be necessary to have both at national and subregional levels mechanisms for co-ordination and monitoring. While each national Government will no doubt create its own instrumentality, at the subregional level the Ministerial Councils of the Eastern and Southern African, West African, Central Africa, North African and the Great Lakes Community Multinational Programming and Operational Centres (MULPOCs) created at the thirteenth session of the ECA in Kinshasa in 1977 could perform this role. At the regional level, a periodic meeting of African Ministers responsible for Transport and Communications will be held to undertake the monitoring and co-ordination.

12. In view of the call on all United Nations and non-United Nations organizations to co-operate fully to ensure the success of the Decade, an Interagency Co-ordinating Committee consisting of all relevant United Nations organizations, OAU and African regional organizations in the field of transport and communications will be set up under the aegis of ECA which will provide the secretarial services. In addition, the existing institutions for the co-ordination and monitoring of activities within each transport mode will be strengthened. An example is the Co-ordinating Committee on PANAFTEL (consisting of ECA, OAU, PATU, ITU and ADB) set up by the Assembly of Heads of State and Government of the OAU.

This Interagency Co-ordinating Committee will be responsible for the collection and collation of documentation needed for the preparation of periodic reports for the Conference of Ministers. Reports adopted by this Conference will be, on the one hand, sent to the United Nations Secretary-General to be submitted to the General Assembly through ECOSOC, and on the other hand to the OAU Secretary-General to be submitted to the OAU Summit Conference of Heads of State and Government.

III. Mobilisation of resources for the implementation of programmes and projects during the Decade

13. The implementation of programmes and projects which will achieve the foregoing strategy and objectives will require mobilization of substantial resources first and foremost at national level. But given the extremely difficult resource position of all African countries, this means considerable material, financial and technical resources will have to be mobilized by the international community from time to time during the Decade to augment internally generated African resources. It will be necessary for the first effort at mobilization of resources by the international community to take

place as soon as possible to implement on-going projects. Accordingly, it is suggested that the United Nations Secretary-General should convene some time in 1979 a meeting of plenipotentiaries for the purpose of mobilizing resources from the international community for the implementation of the programmes and projects during the Decade.

14. At the organizational level, in order to enable ECA to play fully and effectively its role as the primary organization for co-ordinating and monitoring activities at governmental, intergovernmental and interagency levels, it will be necessary to give it adequate resources at the earliest possible opportunity.

C. GOALS AND OBJECTIVES

GENERAL TRANSPORTATION

15. Beyond the measures and objectives adopted for the various individual modes of transport, over-all transportation planning and development is of crucial importance. Such planning has been growing in Africa although it remains weak in many countries.

16. A particular objective of the Decade will be to strengthen and fully Africanize planning and management of transport infrastructures and of transport services.

17. Toward the achievement of this objective high priority will be given to identifying and building up regional centres for high-level training in transportation planning and management.

18. Aid will have to be provided to African States to enhance the planning of transport and communication programmes

ROAD TRANSPORT

(a) Background

19. The African road network is at present rather undeveloped. It is made up first and foremost of seasonal earth roads. If one considers the roads open to traffic all year subject to a few restrictions, the parameters indicate that the backwardness of the African continent in this respect is still substantial.

20. Not only is the infrastructure inadequate, but the general condition of the network of both asphalt and earth roads often leaves much to be desired in many countries. Maintenance is insufficient if not poor and irregularly carried out, generally because of the very limited number and quality of technicians, equipment, and lack of financial resources.

21. At the initiation of the United Nations Economic Commission for Africa, five major trans-African highway projects are currently in progress in the continent, namely: (i) Mombasa-Lagos Trans-African Highway; (ii) Dakar-Ndjamena Highway; (iii) Lagos-Nouakchott Highway; (iv) Cairo-Gaborone Trans-East African Highway; and (v) Trans-Saharan Highway.

22. Intergovernmental co-ordinating committees have been established for the five highway projects. The task of the Committees is to plan and co-ordinate not only the construction but also the studies and measures required for the sound utilization of the international highways. The ECA Trans-African Highways Programme serves as a secretariat to the Co-ordinating Committees and is responsible for organizing and serving meetings and for preparing the various studies required.

23. The five highway projects, which are of interest to 41 African countries, constitute a road network which covers a major portion of the continent. The major trans-African highways cover a total length of 31,519 km, while their feeder links total 43,066 km.

24. It should be noted that if each of the 42 independent countries in Africa (other than Lesotho which is totally surrounded by South Africa and the islands of Cape Verde, the Comoros, Madagascar, Mauritius, Sao-Tomé and Principe and the Seychelles) had one road link with each of its neighbours, there would be a total of 84 inter-State links, of which only 25 are currently of all-weather standard, 53 are dry-weather tracks or partially improved earth roads and six do not yet exist. The total length of the 84 inter-State links is about 104,330 km, of which 45,600 km (44 per cent) are bitumen surfaced, 16,900 km (16 per cent) gravel surfaced and 41,830 km (40 per cent) consist of partially improved and unimproved earth roads, tracks and trails.

(b) Strategy

25. The main elements of the strategy are:

(i) Facilitation of transit on existing inter-country road links by simplification of border-crossing formalities, adoption of bilateral reciprocal arrangements on vehicle movements, strict control of unofficial tolls and adequate maintenance of the infrastructure, etc.;

(ii) Harmonization of the various national highway codes, roads signs/signals, and axle load limits, so as to enable infrastructures and equipment to be built in future in such a way as to render inter-country transit as easy as possible;

(iii) Improvement of the inter-country highway network in the most appropriate manner and as rapidly as each country can manage. For this purpose a Pan-African Indicative Road Network Plan will be prepared and maintained by ECA to assist national investment planners to give adequate consideration to highways of international significance;

(iv) Development of sufficient training facilities within Africa, national and multinational as appropriate, to meet the full needs of African countries for trained personnel at all levels of highway planning, construction and administration and of road transport;

(v) Rapid development of national capacities for rural road planning, construction and maintenance, consistent with the increasing emphasis of African countries' national development plans on rural development.

(c) Objectives

26. To improve economic co-operation among African countries and in particular to develop trade among them, it is essential to link adjoining States by at least one all-weather road. It is this goal which is being pursued through the policy of creating trans-African highways supplemented by feeder roads.

27. In addition to the aforementioned five major highways, the secretariat is studying the development of four other trans-African Highways: (i) Tripoli-Windhoek; (ii) Nouakchott-Cairo; (ii) Ndjamena-Massawa; and (iv) Beira-Lobito.

28. These nine major trans-African highways would serve as backbones of the pan-African road system and either concurrently or subsequently, as the need may be, they would be connected by feeder roads to complete, stage by stage, the arterial highway system in the continent.

29. To this end, the secretariat will prepare a Pan-African Indicative Road Network Plan as the first step in an investigation which would lead ultimately to determining the priorities of inter-country road links so that economically justified projects would be selected for financing in accordance with regional and national needs.

30. The Plan will give precise definition of the current status of the inter-country road links; identify the studies and works required to bring the roads to all-weather standard; compute the technical and financial resources required for the realization of the road links; and determine priorities for a phased investment programme. To this end, the project activities will include the following:

(i) Collect all available data on completed, under construction and planned inter-country road projects and report on their current status;

(ii) Make an inventory of existing and planned inter-country railways, pipelines and inland water services that would influence the proposed inter-country road links and determine whether they are complementary to or competitive with the proposed road link;

(iii) Identify the routes which should be designated as inter-country road links, taking note of the need of adequate road infrastructure for the international traffic of the land-locked States, and recommend a basic network of inter-country primary routes that need to be improved to an all-weather standard according to a phased programme of investment: immediate, medium- and long-term plans;

(iv) Identify the various studies (feasibility, engineering, etc.) and improvement works required to bring the inter-country road links to all-weather standard;

(v) Compute the technical and financial resources required for the realization of the inter-country road links and recommend ways and means to meet these requirements; and

(vi) Identify the legal and administrative barriers to travel and trade along the inter-country road links and formulate proposals designed to eliminate or reduce their effects on international exchanges in order to permit the fullest utilization of the inter-country road links;

(vii) Maintain the existing road construction equipment through regular maintenance and set up or improve, for this purpose, the appropriate technical and financial structures;

(viii) Promote the development of road construction and equipment technology adopted in Africa.

31. The plan will be of immediate advantage to ministries and other boards responsible for road construction and will also be communicated to financing institutions and also to bilateral and multilateral aid agencies concerned.

MARITIME TRANSPORT

General background

32. The African regions consist of 49 countries and south of the Sahara there are about 38 independent countries, seven of which are islands (seychelles, Cape Verde, Sao Tome, Equatorial Guinea, Malagasy Republic, Mauritius and Comoros) and 13 have no direct access to the sea (landlocked). Nine of the 38 countries lie on the East African seaboard and 18 are on the West Coast. Four of the landlocked countries (Mali, Upper Volta, Niger, and Central African Empire use ports on the West Coast, while five (Malawi, Burundi, Rwanda, Uganda and Swaziland) use East coast ports and two countries (Chad and Zambia) use ports on both coastlines. Lesotho and Botswana are served by South African ports. 1/

33. Current estimates indicate that 95 per cent of African international trade traffic is transported by sea and that up to 97.5 per cent of this is carried by foreign owned vessels, leaving only 2.5 per cent to African-owned vessels. Statistics also reveal that Africa owns only 0.7 of one per cent of total world merchant fleet capacity compared to its share of 13.7 per cent of world maritime trade traffic in 1975.

34. Almost 90 per cent of African traffic in goods and merchandise is currently effected by sea; 97.5 per cent of this maritime traffic is itself carried by non-African liner conferences which have shared the whole of the continent among themselves in areas over which they exercise a near-monopoly: fixing freight rates for the various products; and determining unilateraly the transport conditions, almost without any consultations with the shippers and the countries. Each "conference" in fact is a kind of "closed club" using all kinds of means to limit intervention of the countries they serve. Thus the Code of conduct for liner conferences prepared under the auspices of UNCTAD is encountering the opposition of many developed maritime countries. This Code of conduct, which is very favourable to the developing countries, introduce the Right for these countries of shipping 40 per cent of their freight in their own fleets and leaving 20 per cent to the shipping companies of third countries.

35. But even when the Code is ratified by all the Members of the United Nations, its application will require that the developing countries should have their own vessels, technicians and administrators to manage, administer and operate their shipping services themselves.

Shipping

36. By the end of 1978, the African national ocean-going merchant fleet had attained nearly 6 million tonnes deadweight, involving 298 units. The world tonnage as of 1 July 1978 was 641 million tonnes, and the share of the developing countries was 51 million tonnes.

1/ Joint Maritime Mission - Africa 1975, p.ii

37. In spite of the fact that Africa's demand for shipping exceeds supply by the ratio of about 1.4, no major action is being taken by African countries to improve the situation. Instead major advances in shipping technology and addition of capacity continue to be made by the developed nations, so that Africa's future share of both total world merchant fleet and international trade traffic carried are likely to actually decrease in the absence of concerted collective action.

38. Most of the shipping companies in the Sub-Saharan African Region are relatively small in size and operating from one to a maximum of about five vessels. In view of their small sizes and limited financial resources, the management structur of these companies is usually very simple and in most cases devoid of expertise and management skills in shipping. Thus it is only natural that the financial situation of most African shipping lines is precarious and most of them exist on national subsidies. In addition, there are only few good facilities within the region for training professional and technical personnel in shipping management and operations, with the result that companies find it difficult to train their staff or recruit qualified and competent staff within Africa. In fact only a co-operation between the African fleets with respect to purchases and to trade will enable them to defend their position.

Ports

39. The African coastline contains more than 80 sea-ports, of which some 49 are major international ports. Only a few of these ports are well managed and efficiently operated, whereas most of the ports suffer from serious deficiencies in their operations.

40. It must also be pointed out that several African ports have a regional function because they provide shipping services for the landlocked or semi-landlocked countries. These ports are:

- In West Africa: Dakar, Abidjan, Lomé, Cotonou, Port Harcourt for the following landlocked countries - Mali, Upper Volta, Niger and Chad.
- In Central Africa: Douala, Pointe Noire, Lobito for Chad, the Central African Empire, Zambia and Zaire.
- In East Africa: Mombasa, Dar-es-Salaam, Nacala, Beira, Maputo for Uganda, Rwanda, Burundi, the east of Zaire, Zambia, Botswana, Lesotho and Swaziland.

41. It is therefore apparent that the general efficiency of maritime transport partly depends on the efficiency of African port operations and not entirely on the construction of more berths.

Goals and objectives

42. (a) Special emphasis must be placed on the development and improvement of the ports in Africa. One of the difficulties if not the most pressing problem in maritime transport, is inefficient ports operations; poor management; poor transport interface at the ports, as well as poor radio links between ships on the high seas and the ports. It is important to distinguish between the inadequacy of physical facilities and the inefficiencies in port operations in designing solution to reduce the turnaround time of vessels.

(b) Consideration of matters relating to the adoption of advanced unitized forms of transporting cargo and development of multimodal transport and cabotage.

(c) During the Decade, special attention should be drawn to the maritime transport requirements of developing land-locked countries of Africa.

(d) Continue to establish subregional and regional centres for the training of maritime personnel.

(e) Encourage the establishment of national/regional and/or subregional shipping companies. The setting up of a shipping company with vessels and technical and administrative personnel requires very substantial investment and presents considerable risks; the viability of such investment is closely linked to the management efficiency and guaranteed annual tonnage, since below a certain cargo tonnage threshold, the vessels generally operate at a loss. This fully justifies pooling of their technical facilities in setting up multinational companies which, by carrying the quotas of several countries, will result in viable operations.

(f) Harmonization of the administrative, customs and immigrations formalities of the ports and adoption of identical nomenclatures, documentations, and maritime legislation by all the countries. This will make it possible in particular to harmonize port statistics which should assist in rational planning and operational analysis.

(g) During the Decade every effort should be made to discourage investment in open registry vessels, and correspondingly to encourage development of national regional shipping lines.

(h) African governments be encouraged within this period to adopt international maritime conventions negotiated under the auspices of UNCTAD and IMCO.

(i) Assistance should be given for the development of national maritime codes, including those in marine insurance. This could best be done through technical assistance projects.

(j) Marine pollution has become a serious problem on a world wide basis with severe economic and social implications. Little or nothing has been done at the national or regional levels to develop marine pollution measures in Africa. Under its Regional seas programme, UNEP carried out a survey of 14 countries around the Guld of Guinea and adjacent coastal areas in 1976. The mission made proposals for the development of a convention to protect the marine environment against pollution and guidelines for the prevention and abatement of marine pollution. In order to set up subregional marine pollution control centres, the expertise and collaboration of IMCO and UNEP would be needed.

MULTIMODAL TRANSPORT

43. The container "revolution", together with the concept of global distribution which is associated with it, gives increasing importance to the global intermodal transport of goods from the departure point to their final destination.

The situation in Africa does not always make it possible to use the advantages of this system. The various bodies responsible for overland and maritime transport do not always act in full co-operation. The facilitation of transport is usually far from simplifying and speeding up the use of transport services properly so-called.

A weakness in any parts of the dispatching from one end to the other compromises the efficiency of the whole system. In particular, the efficiency of maritime transport largely depends on the organization of overland transport in the hinterland of the ports.

Objectives

44. Consultative commissions should be established in every country for the purpose of following up the day-to-day functioning of the "Multimodal transport" system.

It would seem desirable in particular to promote the development of "Multimodal transport operators" (MTO). These enterprises issue combined transport documents, dispatch the goods in accordance with the consignor's wishes and instructions and undertake (by contract) to execute or have executed the functions specified, including the dispatching over a predetermined route and the customs clearance formalities.

45. Assistance should be given to selected African countries in the implementation of the convention on international multimodal transport if such a convention were to be adopted at the diplomatic conference.

A regional approach to the issue of the development of container standards should be pursued during the Decade.

46. There is a need also for "Transport Institutes" to be established in Africa.

This need is felt by the various officials and specialists in modes of transport.

These institutes will have a threefold task:

- To collect all the information on transport which is now scattered, to analyse it and to conduct specialized surveys.
- To train transport officials, and teach them to identify the problems of each mode in relation to the others.
- To conduct research on the new transport techniques which can be applied in Africa.

AIR TRANSPORT

Background

47. Air transport is still relatively undeveloped in Africa as compared to the other continents. In 1977 it represented 5 per cent of international passenger traffic in the world, and 3.3 per cent of the freight traffic. Compared to the above percentage the development of African national and intra-regional links is lagging further behind, since these links represent only 30 per cent of the total African passenger traffic and 4 per cent of the total African freight traffic.

48. The African network still lacks cohesion, a fact which can be explained by a protectionist policy on the part of the States and a lack of concentration between them in the economic field.

49. This situation is reflected, in particular, in a reluctance to grant, except in a restrictive way, air traffic rights of a purely commercial nature (rights of the fifth freedom of the air or cabotage (intermediate hopping), other than those actually included in bilateral agreements concluded between two States.

50. The States concerned tend to keep, for the benefit of their own airlines, a traffic which is still little developed and to intensify the most profitable, high-density traffic links, such as those on the south-north axis, to the detriment of the new transverse lines where they would have to assume, by themselves, responsibility for the development of an operation which would be unprofitable at the start.

51. African States have long realized that air transport is a sector in which losses are certain if adequate levels of utilization of aeronautical facilities and traffic are not guaranteed. Although some multinational airlines have faced political difficulties, the most significant trend is towards collective efforts. African member airlines of AFRAA are working towards pooling arrangements in the areas of traffic, maintenance, training and exchange of manpower resources. AFCAC has pursued the same objectives, as well as encouraging the formation of multinational airlines. These efforts will promote the proper use of available resources and make air transport in Africa more competitive. Another problem is the poor distribution of air routes: some countries are linked daily to Europe North America and even Asia, but have no air links or very few with certain sub-regions of the continent; other countries are served only irregularly, with the result that it is often impossible to get there at short notice. This is the case in particular for certain land-locked countries which have no national airlines providing international services. Another important aspect of the development of air transport in Africa is the need for improvement of air navigation facilities and services. At present, less than 50 per cent of the facilities required under the ICAO Air Navigation Plan for Africa have been constructed.

Goals and objectives

52. The Transport and Communications Decade in Africa should attach special importance to seeking and applying solutions to all these crucial problems. The activities suggested under the Decade should:

(a) prompt African States and airlines to promote better use of air transport facilities and services by adopting bilateral and multilateral conventions aimed at:

(i) Pooling of traffic;
(ii) Pooling of equipment;
(iii) Joint establishment and pooling of training facilities;
(iv) Pooling and joint establishment of maintenance and overhaul facilities;
(v) Exchanges of personnel and standardization of training and licencing requirements;
(vi) Liberalization of traffic rights among African States;
(vii) Provision and, where appropriate, joint operation and pooling of air navigation facilities and services;

(b) prompt African States to work towards the formation of multinational airlines;

(c) encourage African States to promote harmonization of domestic, inter-African and other international traffic;

(d) encourage African States and airlines to promote the development of air freight and air mail in Africa. Since the aeronautics industry has not as yet produced short and medium haul cargo aircarft, it would be advisable to seize the opportunity to promote this type of aircraft which is more suited to the needs of Africa possibly through the establishment of a specifically African regional industry.

Machinery for implementation of activities during the Decade

53. In order to improve the availability and profitability of African air transport, there is a need for co-operation among African States and among airlines in almost all aspects of civil aviation to ensure rational utilization of air transport resources. Such co-operation must be designed to result in improved profitability of individual airlines, but, more importantly, the eventual formation of multinational airlines - which with greater available resources would not only be able to improve the air service, but also to make African airlines more competitive.

To achieve the above objectives there is a need to assist African States at both the national and the multinational levels in:

(a) The provision of adequate air navigation facilities and services, particularly in the land-locked, least developed and island countries;

(b) The standardization of flight and ground equipment;

(c) The standardization of passenger and freight handling procedures;

(d) The pooling of traffic, equipment and facilities;

(e) The realization of the air freight potential of the individual countries identified under UNDP/ICAO project RAF/74/021;

(f) A preliminary investigation of air freight potential for the countries not covered by the UNDP/ICAO projects;

(g) Improvements in airport services and facilities.

RAILWAY TRANSPORT

A. Present status

54. The density of the African railway network is very low. For 29,600,000 km^2, the African continent has only 80,706 km of track, which gives an average density of 2.63 km per 1,000 km2, whereas in Europe, which has other highly developed modes of surface transport too (roads, rivers, canals,...) there is a network of almost 300,000 km for an area of 4,750,000 km2, or over 60 km 1,000 km2.

55. On the African continent, 10 countries have no national railway or section of an international railway. They are the Gambia, the Niger, Somalia, Chad, Rwanda, Burundi, the Central African Empire, Lesotho, Guinea-Bissau and Equatorial Guinea.

56. The African railway network is made up of a series of secondary networks, most of which are national in character and often independent of one another. Moreover, they do not all have the same technical characteristics.

57. However, to facilitate the economic integration of the countries of the region and in particular to offer the land-locked countries reliable means of access to the sea, the primary objective of the Union of African Railways (UAR) is to ensure the unification, development, co-ordination and improvement of the railway services of members of the Union with a view to connecting the networks among themselves and with other modes of transport linking Africa with the rest of the world.

(a) Track gauge

58. There are nine gauges, but only three, it is true, are widespread.

Normal European track: gauge 1.435 m: 11,743 km (14.5 per cent)

Standard African: gauge 1.067 m: 49,473 km (61.3 per cent)

Metric track: gauge 1.000 m: 15,472 km (19.2 per cent).

The normal European track gauge is used in North Africa from Morocco to Egypt. The standard African track gauge is that of all the southern Africa network including Zaire, and of the last railway to be completed (the Tazara between Tanzania and Zambia), as well as the networks of Sudan, Ghana and Nigeria. The metric track gauge is that of the railways of West Africa (Cameroon, Senegal, Ivory Coast, Mali, Upper Volta, Guinea) and of East Africa (Kenya, Uganda, Tanzania).

59. Adoption of 1.067 m as the standard gauge for the entire continent would facilitate the interconnexion of the networks. At the present time only the southern African network is well linked up (and the fact that the Tazara has been built with the same gauge should facilitate the interconnexion of the network with the East African network) in that it comprises the South African networks, those of Malawi, Swaziland, Zambia, Southern Rhodesia and Mozambique. The Southern African network then as an entity accounts for 52.4 per cent of Africa's railway network south of the Sahara and almost 54 per cent of the total in Africa.

60. Twenty-three of the 38 networks which have been identified have now adopted the standard 1.067 m gauge and those with different gauges, apart from the mining railways, are scattered over the various subregions. This should not however impede the standardization of the superstructure of African railways, particularly those south of the Sahara where the difference between the gauges is usually slight and so would not present a definite obstacle in terms of linkages.

(b) Braking

61. Two braking systems are now used in Africa, the vacuum brake and the compressed air brake is mainly used on the North African networks where the gauge is 1.435 m, while the more usual braking system is to be found in the West, Central and East African networks.

(c) Rolling stock structure gauge

62. UAR has made a preliminary enquiry into this problem among member States. It has worked out a standard gauge and, on the basis of an initial study based on information covering 16 African networks, it has concluded that, with their present fixed installations (height and middle width), all the networks except Congo-Océan can use the UAR standard gauge rolling stock.

(d) Traction

63. Of the 80,706 km of railway in Africa, only 6,500 km, or less than 9 per cent, are electrified. Electrification is in fact limited to sections with a high density of traffic and urban areas basically with suburban services. Even then, only five networks are involved, three of which are in North Africa (Egyptian Railways, SNTF of Algeria and ONCF of Morocco), one in Central Africa (Kinshasa-Diolo-Lumumbashi railway) and the South African railway network.

64. Apart from electrical traction, the most economic form of traction is diesel. Accordingly, the trend in all African railway networks that are not electrified is to opt for diesel traction while steam traction is being phased out purely and simply by replacing steam engines with diesel engines.

(e) Loads and speeds

65. Another problem is that of loads. For the African countries south of the Sahara, the load per axle varies from 12.5 to 18 tonnes maximum, with the exception of the private mine railways built in recent years which authorize loads of 20 tonnes per axle. These standards are low compared for example with the European standards which are between 18 and 22 tonnes per axle.

66. Furthermore, the rail networks in African countries, apart from those of North Africa, authorize only low speeds; the maxima are of the order of 40 km per hour for passenger trains and 30 km per hour for goods trains. Higher average speeds would permit more profitable use of the rolling-stock and consequently greater economic benefits.

67. These two factors, limited average speed and low permissible load per axle have an unfavourable effect on the operation and capacity of the various routes. An increase in speed is linked to the improvement both of the rolling-stock and hauling stock and of the horizontal and vertical alignment of the tracks. At the time when most of the networks were constructed, technical progress did not permit the adoption of the best alignments. It is also beyond doubt that the state of the African rail network is not the same in all the countries and that the statistics provided in this note cannot give an exhaustive idea of the nature and scope of the work required on each of the national networks, to improve the African rail network.

B. Goals and objectives

68. To cope with the requirements of developing Africa, the existing railway networks are to undergo a series of changes in their capabilities, direction and routings. Moreover, full utilization of existing railway networks is necessary. Essential first order priority during the Decade should include:

(a) Therefore various measures have been decided for renewing the tracks in order to adapt them to modern requirements: realignment of the lay-out on networks with too difficult characteristics, changing of the track equipment (weight of the rail, density of sleeper spacing), welding of the rails from station to station to reduce the wear of rolling stock, modernization of track signalling.

(b) Development of managerial and planning skills for the efficient operation of railways.

(c) Standardization of equipment used on African networks and co-ordination of operating regulations and practices.

(d) Establishment of traffic exchange points for movement of traffic between adjacent networks and also for modal exchange.

(e) Extension of networks to connecting points in adjacent countries.

(f) Construction of trans-African railway network.

RIVER AND LAKE TRANSPORT

Generalities

69. The major African rivers and internal lakes which offer potential for navigation are in most cases international waterways crossing several countries. As a result, and because large-scale development operations on any section of these waterways may cause substantial alterations in their courses (and particularly downstream from these operations), the policy for the development of these rivers for the various possible uses, including transport, must necessitate co-operation by all the countries concerned.

70. The co-operation needed for the joint development of African rivers and internal lakes with a view to their sound exploitation, and in particular for transport, must be continuous and must encompass the formulation, financing and implementation of the programmes and also the management of the waterways. Consequently it must be incorporated in the programme for the Transport and Communications Decade in Africa. For such co-operation the countries must establish standing organizations possessing all the authority required to draw up a common policy and ensure its implementation.

71. During the transport decade, special attention should be paid to the major international rivers offering transport possibilities and capable in particular of serving land-locked zones or regions of the continent as well as the Sahel regions. The studies to determine all the conditions of navigability of these internal waterways should be carried out and the development plans drawn up.

Objectives

72. The principal rivers and lakes with which activities during this period should therefore deal as a matter of priority are, the list not being exhaustive:

(a) Rivers : Nile, Senegal, Niger, Gambia, Zambezi, Volta, Mano, Congo/Zaïre.

(b) Lakes : Chad, Tanganyika, Malawi, Victoria, Kariba, Kivu.

73. The principal action to be undertaken is both at the national and international level. For the rivers and lakes which already have a standing management body, assistance should be provided to the member States for :

- strengthening co-operation and joint exploitation of the possibilities offered by these rivers and lakes;
- the development of transport on these navigable waterways by placing special stress on infrastructure (internal ports), management and legislation, and means of facilitating travel and transport. (Customs conventions, standardization of documents etc...).

74. For lakes and rivers which as yet have no standing management bodies, it is necessary to assist in establishing these bodies.

75. Since the possibilities and benefits offered by the rivers and lakes in Africa are not so far sufficiently exploited, the Transport and Communications Decade in Africa should be for us an opportunity to draw up an extensive programme in the light of country requirements, the other existing modes of transport, the transport conditions and costs and the magnitude of the investment which will be required.

TRANSPORTATION BY PIPELINES

76. Transportation of liquid and bulky products is favourably carried out under some technical and economic conditions through pipelines, gas pipelines and mineral pipelines. This mode of transport can be considered in most cases as a means of transport to supplement maritime transport just as railway and river transport. Although less widespread in Africa, pipelines are used in certain countries such as Algeria, Tunisia, Morocco, Libya, Egypt, Kenya and Zaire.

77. As a result of the rising cost of fuel and the potentials held by this mode of transport, it seems necessary to carry out a survey to examine under what conditions and for which African sub-region this type of equipment could contribute to the economic development of the continent.

COMMUNICATIONS

(Postal services, Telecommunications and Broadcasting)

78. The operative paragraph 3 of the General Assembly resolution 32/160 calls for provision of "Assistance to African States in their preparation of a detailed plan of action for the Decade etc .." in addition to the "preparation and implementation of a global strategy for the development of transport and communications in Africa ...." called for in ECA resolution 291(XIII) and endorsed in the General Assembly resolution.

79. This draft proposal for the Decade Plan is therefore conceived separately for the national and regional levels.

A. National programmes

80. The main characteristics of national communication services particularly in the sub-Saharan countries of the Region are inadequate physical facilities and skilled manpower and the absence of equipment manufacturing capabilities. National communication development plans that are available are designed to correct some of these inadequacies and in certain cases the imbalances in provision of services between the urban and rural communities as well. But most of these plans are based on envisaged network growth rates of five percentum and sometimes even less. Considering the substantial lee-way to be made in providing services up to current average levels of availability in the rest of the world, growth rates have to be considerably greater than those generally current in most communication development plans.

81. The main constraint to adequate growth of the national communication systems apart from unskilled management, are limited resources and inadequate funding arising from relatively low priority rating usually accorded communication network development, especially broadcasting and postal services, by national planning agencies. Estimated average national investment as a percentage of GDP required to generate rapid growth (assuming availability of adequate trained manpower including skilled managers) up to levels within the average range of international norms is of the order of 1 or 2 as compared to present average of less than one-twentieth.

82. Currently a substantial number of countries in the region are concerned in their development activities in the telecommunications sector with the construction of a framework of trunk circuits including those forming part of the Pan-African Telecommunications Network (PANAFTEL). Efforts are also being made to improve and expand existing local networks and switching systems and these should improve the present unsatisfactory penetration of telephones from the present range of 0.1 - 6.5 per 100 of the population compared to the world average of 14.5.

83. Provision of telecommunication facilities and services is heavily weighted in favour of urban communities in the countries of the Region. The ratio is sometimes made out to be 20.1 against rural communities. A significant number of countries have on-going projects to improve services in common carrier, broadcasting and postal communications in the rural areas. Others have plans.

84. It is proposed therefore, in accordance with operative paragraph 3 of the General Assembly resolution No. 32/160 to provide assistance to governments that may request it with respect to their national communications plans. For this an inter-agency team of four made up of experts from UPU, UNESCO, ITU and ECA is envisaged and their services will be made available on request to countries. This team will be sustained for a period of about 9 months and will have its base at ECA headquarters.

85. It will review existing national plans, proffer advice on improvements and implementation and provide inputs to the proposed regional communication development plan of the Decade and undertake field missions on request to assist in the preparation of and advise on the implementation of national plans in the three principal communication subsectors.

B. Regional programme

86. To the extent that a Regional project such as the PANAFTEL has a multiplying effect on national communication operations, the second half of the Decade programme in communication will be designed to provide for Region-wide services as well as to assist in speeing up the development of national communication services to levels of availability, use and operational efficiency within the average of international norms and at rates commensurate with the state of their economies and social conditions. It will also be designed to assist countries of the Region to take on gradually on a co-operative basis the responsibility for the conception planning and implementation of inter-regional services.

87. The major objective must be the interconnexion of the national telecommunications networks by completing the pan-African telecommunications network so that: by the end of the decade the subscribers in Africa can automatically enter into communication; but this implies that for the services offered to be of a high and satisfactory level, there must be a high degree of maintenance and functioning of the African telecommunications network both national and region.

88. Every country must define its actions for the dissemination of the use of the telephone, adopting a higher annual rate of growth with, for example, at the end of the decade a target of one telephone per 100 inhabitants and one public telephone booth for 10,000 inhabitants.

89. With respect to broadcasting and telecommunications, it will be necessary:

- to achieve by the end of the decade a total autonomy in the training of skilled manpower at all levels;

- to work out long and medium-term development plans;

- to encourage the establishment of industries related to telecommunications for the production at least of basic equipment (receiving sets, cables, telephones etc...) after the necessary feasibility studies.

90. Again in connexion with broadcasting, efforts will be made to improve, if necessary, the coverage of national territories by powerful transmitting centres of higher quality, and to ensure for every household the use of one receiving set.

91. A programme of action on the development of postal services (including the implementation of OAU resolution on the establishment of a Pan-African Postal Union) is expected to be established by UPU and ECA. It may include such aspects as mail routeing, tariffs, expansion of postal services infrastructure in urban and rural areas and training programmes on a large scale.

92. For the Transport and Communications Decade, the following activities are envisaged in summary:

(a) Telecommunications

- Improvement and Expansion of national networks;
- Achievement of the Panaftel network;
- Interconnexion of the capital of the African countries without extra-African transitting;
- Harmonisation of tariff systems and international accounting procedures in Africa;
- Development of telecommunication and electronics industry in Africa;
- Measures to meet manpower needs at all levels of skill including university professionally trained engineers over the Decade;
- Development of the various telecommunication systems connected with transport services in particular aeronautical and maritime;
- Development of Remote sensing facilities.

(b) Postal services

- Development of postal services; infrastructure (in both urban and rural areas);
- Development of mobile rural mail services;
- Organization of multinational Transit centres;
- Measures to meet manpower needs over the Decade;
- Organization of international accounting among African countries;
- Development of mail routeing;
- Development of mobile rural mail services;
- Staff training;

Organizations of international accounting among African countries.