ECONOMIC COMMISSION FOR AFRICA
Sixth session
Addis Ababa, 19 February - 3 March 1964
Item 5 of the provisional agenda

REPORT OF THE STANDING COMMITTEE ON INDUSTRY,
NATURAL RESOURCES AND TRANSPORT ON ITS
SECOND SESSION
(Addis Ababa, 3-13 December 1963)

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REPORT OF THE STANDING COMMITTEE ON INDUSTRY,
NATURAL RESOURCES AND TRANSPORT ON ITS
SECOND SESSION

Organization and attendance

1. The Standing Committee on Industry, Natural Resources and Transport was convened to meet, in accordance with resolution 43(IV) of the Commission, from 3-13 December 1963 in Addis Ababa. Three working parties were established, on Industry, Natural Resources and Transport. Each working party submitted a report for adoption by the plenary. These reports, as adopted, are reproduced below.

2. The meeting was attended by delegates from the following member and associate member countries: Algeria, Bechuanaland, Congo (Leopoldville), Dahomey, Ethiopia, France, Ghana, Liberia, Madagascar, Mali, Morocco, Mauritania, Mauritius, Niger, Nigeria, Sierra Leone, Tanganyika, Tunisia, Uganda, the United Arab Republic, the United Kingdom. Observers from the following countries attended: Bulgaria, Federal Republic of Germany, Hungary, Israel, Italy, Japan, the Netherlands, the Sudan, Sweden, Turkey, the United States of America, the Union of Soviet Socialist Republics. The following specialized agencies were represented: Food and Agriculture Organization (FAO), International Atomic Energy Agency (IAEA), International Civil Aviation Organization (ICAO), World Health Organization (WHO), World Meteorological Organization (WMO), United Nations Educational, Scientific and Cultural Organization (UNESCO). Observers from Comité interafricain d'études hydrauliques (CIAEH), East African Common Services Organization (EACSO), International Road Federation (IRF) and Organization africaine et malgache de coopération économique (OAMCE) also attended the session. A list of participants is attached as annex I.

3. Mr. M. Abdelkader (Algeria) was elected chairman, and Mallam I.M. Damoida (Nigeria), Mr. A.J.C. Small (Tanganyika) and Mr. C. Tnani (Tunisia) vice-chairmen. The latter were also appointed chairmen of the Industry, Transport and Natural Resources Working Parties, respectively.
4. The provisional agenda prepared by the secretariat was adopted after amendment. The revised version is attached as annex II.

5. The meeting was opened on 4 December by H.E. Lij Endalkatchew Makonnen, Minister of Commerce and Industry in the Imperial Ethiopian Government, whose statement is reproduced in annex III. Mr. A.F. Ewing, Director of the Division of Economic Development, also made a statement which is reproduced in annex IV. Dr. I.H. Abdel-Rahman, Commissioner for Industrial Development of the United Nations; addressed the Committee on 11 December. His statement is reproduced in annex V.
(a) Industrial co-ordination missions

6. Provisional reports of the Economic Commission for Africa industrial co-ordination missions to West Africa and to East and Central Africa were introduced by the leaders of the mission (E/CN.14/INR/25 and 37). The basic objectives were recalled: investigations of the scope for development of industries and the laying down of new industries on a scale requiring markets beyond the scope of most African countries, and hence sub-regional co-ordination. It was pointed out that both reports were in a preliminary and incomplete form. Much of the supporting data and reasoning which had led to the suggested industrial patterns remained to be added. Furthermore, although the primary objective of the missions had been an investigation of larger scale industry, the full reports would contain substantial material on the scope for import substitution through development of small and medium scale industries serving essentially domestic markets. It was planned to present the final reports to the Commission at its sixth session.

7. After a general discussion of the reports and on problems of industrial co-ordination, each report was examined section by section. The Committee reaffirmed the essential importance of co-ordinated development of large scale industries and hence of sub-regional co-operation, while recognizing that there was scope for all-African co-ordination in the development of certain very large industries, e.g., steel and petrochemicals. The importance of following up the reports by vigorous action was unanimously recognized. The following recommendations were agreed:

(i) A conference at a high level should be held in both the West African and the East and Central African sub-regions as soon as possible after the preparation of the full reports of the co-ordination missions to examine in detail the proposals and suggestions made. In the case of West Africa, the report should be examined at the Conference on Industrial Co-ordination
to be held in Bamako in 1964. In the case of East and Central Africa, the hope was expressed that a conference of ministers, as recommended in the report Part IV, 12 (d), would be held in the course of 1964, and the Executive Secretary was requested to make such further preparations as the governments concerned deemed necessary; 

(ii) The Executive Secretary was requested to render all possible assistance to the carrying out of feasibility studies of the industries proposed in the reports, in co-operation with the United Nations Centre for Industrial Development and the United Nations specialized agencies, by providing United Nations experts or assisting governments to find experts under the Technical Assistance Programme, by helping governments to prepare requests to the United Nations Special Fund, and by seeking the support of non-African countries prepared to help in making such feasibility studies; 

(iii) The Executive Secretary and the United Nations Centre for Industrial Development were requested to assist governments to find outside capital, both from the international financing institutions and from non-African governments and other sources.

(b) **World conference on industry**

8. The Commissioner for Industrial Development drew the attention of the Committee to a resolution of the General Assembly that a world symposium on industrialization would be held not later than 1966, preceded, as appropriate, by regional and sub-regional conferences. The Committee endorsed the proposition of holding a world symposium and decided to call an industrial African conference to be held in 1965 and to be preceded by intensive preparations at sub-regional and sectorial levels as may be arranged jointly by the Executive Secretary and the Commissioner for Industrial Development within the available budgetary
resources. The Committee noted that its own intensifying programmes of activities would be a substantial contribution to the success of both the African regional conference and the world conference.

9. The Committee, in supporting these propositions, considered that a world symposium was essential for, and a visible evidence of, the intensification of United Nations activities in the field of industrialization and would be an opportunity for establishing closer contact among African countries and the agencies in a position to provide finance and practical assistance and for promoting the transfer of industrial technology. The world conference would indeed provide, for those countries who are making at present strenuous efforts to achieve a larger degree of industrialization, the widest possible international forum to discuss the many problems arising; it would also serve to focus the world's attention on the needs and problems of industrialization and as a call to mobilize its resources for an over-all effort such as envisaged through the proclamation of the Development Decade.

10. The Committee also approved a suggestion of the Commissioner for Industrial Development to call informal meetings of African ministers of industry and United Nations agency directly responsible for industrialization to exchange views and consultations concerning the activities of the United Nations in giving aid to the African countries. The first of such meetings is proposed to be held in May 1964.

(c) Iron and Steel

11. The Committee examined a study on the development of the iron and steel industry in Africa (E/CN.14/INR/27). In introducing this paper, the secretariat pointed out that it was the first attempt at a comprehensive study of the development of both the market for iron and steel and the iron and steel industry on an all-African basis. It was essentially a background document with no specific conclusions, but might in its final form be useful to African policy-makers and planners. In the discussion, attention was drawn to a number of minor errors, and suggestions were made for further development of the study.
12. It was agreed that an all-African conference on steel should be convened before the end of 1964, which should deal inter alia with perspectives on a detailed basis of steel consumption; an appropriate all-African pattern for the development of iron and steel production, taking into account the scope for division of labour in the production of finished steel products, and the possible creation of an iron and steel institute concerned with research studies and professional training at all levels.

13. The Committee took note of the report of the Meeting of Experts on Iron and Steel in West Africa, held in Monrovia from 14 to 18 October 1963 (E/CN.14/INR/26) and also of the recommendations relating to steel of the ad hoc Conference on Industry held in Lagos on 29 and 30 November 1963 (E/CN.14/INR/51). The Committee endorsed the recommendations of the Monrovia Meeting and those relating to iron and steel of the Lagos Conference, relating to the further studies required with a view to the establishment of an integrated iron and steel works on the coast of West Africa and a second, smaller iron and steel works inland; and the intention to discuss these studies at a further meeting to be held in 1964.

(d) Studies of other industries

14. The Committee took note of the progress made in the studies of industries requested at its first session: chemicals and fertilizers, engineering and non-ferrous metals, and textiles (as reported in E/CN.14/INR/31). It also took note of the recommendations of the Lagos Conference concerning the studies to be prepared, largely by ECA, on cement, tobacco, textiles, flour mills, fertilizers and related problems of transport, payments and exchange. The Executive Secretary was requested:

(i) To convene a conference to be held in Bamako between June and September 1964, in agreement with the Government of Mali as host country and the Government of Niger, the Secretary-General of OANCE and the provisional secretariat of the Organization
for African Unity, with a view to concentrating in one meeting in 1964 discussion of problems of industrialization in West Africa. The conference would consider the reports requested above, together with those on iron and steel (see paragraph 11 above) and the full report of the West African industrialization mission (see paragraph 6 above);

(ii) To enter into consultation with the consultant who was preparing on behalf of the countries who had attended the Lagos Conference part of the documentation for the Bamako Conference, with a view to ensuring co-ordinated preparations for this meeting.

(e) **Industrial financing**

15. The Committee considered an outline of a study of problems of financing industry in Africa (E/CN.14/INR/29). Delegations expressed the desire that this study should be comprehensive, give detailed information on sources of financing, and expose in clear terms problems and experience faced and gained by the different African countries. As regards the method of conducting the study, the majority of delegations agreed with the secretariat's proposals to proceed by way of questionnaires and country studies.

(f) **Industrial statistics: Inventory of African industries and periodic country reporting**

16. The Committee requested the Executive Secretary, in consultation with member countries and the United Nations Centre for Industrial Development, to study the establishment at the country level, possibly within appropriate national departments of industrial development, suitable machinery for periodic reporting about industrial trends, achievements and proposals. Such reports would be prepared in view of being reviewed in meetings of the Standing Committee for Industry, Natural Resources and Transport of the ECA, so as to realize better co-ordination of industrial development and to effect better mobilization of domestic and international resources.
This material should be included in a quarterly information bulletin covering industry, transport and natural resources, built up progressively and eventually replacing the present Bulletin on Natural Resources. The Committee noted the progress reported by the Executive Secretary as regards the development of industrial statistics in the African countries and the project of establishing an inventory of African industrial enterprises. It noted that these two projects were closely linked with the country reporting suggested.

(g) Investment laws and regulations

17. The secretariat introduced a preliminary study on investment laws and regulations in Africa (E/CN.14/INE/28). This was in two parts: part I consisted of an analysis of existing investment laws in Africa on a comparative basis and part II of a brief summary on a country by country basis of existing investment laws and regulations.

18. It was agreed that the Executive Secretary should be requested:

(i) To make available additional copies in both French and English of the document already prepared.

(ii) To request all governments to submit comments on the document by not later than 31 March 1964.

(iii) To revise the document, including not only a summary but a brief appraisal of the national codes and issue it in printed form as soon as possible, in this connexion it was noted that the cost of printing and publishing the document would be US$ 10,000.

(iv) To begin an analysis with a view to establishing eventually unified investment laws by bringing together those elements of investment laws already common to many African countries.

(v) To examine the administrative problems relating to the approval of new industrial enterprises.
(h) Industrial research and training

19. A preliminary report on the possible establishment of institutes for applying industrial research and development on a sub-regional basis, prepared by a consultant from the United Nations Centre for Industrial Development, with the aid of the Economic Commission for Africa secretariat, was examined (E/CN.14/INR/41). Among the points made in discussion were the following:

(i) It was generally agreed that there was a danger of research institute concentrating their activities too much on theoretical research; the main emphasis should be on applied research, closely linked with industrial development.

(ii) A distinction should be made between full scale industrial research institutes and smaller scale centres concerned with applied research and development.

(iii) The sub-regional approach suggested was one possibility but careful consideration should also be given to the establishment of all-African institutes dealing with specific industrial centres and also smaller industrial development centres mainly concerned to serve individual countries;

(iv) The creation of new sub-regional industrial research centres was one possible approach but consideration should also be given to the possibility of requesting existing industrial research centres offering facilities to neighbouring countries. It would nevertheless be difficult to obtain finance and personnel for the establishment of industrial research centres in all African countries and hence there was a prima facie case for a sub-regional approach; however, the sub-regional groupings suggested in the paper under consideration should be regarded as purely tentative and other groupings might well emerge from discussions between the countries concerned.
20. It was agreed that the Executive Secretary, in consultation with the United Nations Commissioner for Industrial Development and with interested countries, should carry out further investigations on the establishment of applied research institutes and industrial development centres, on a national or sub-regional basis, and convene ad hoc meetings as appropriate. These investigations should be carried out in co-operation with UNESCO.

21. The Committee recalled decisions taken at its first session with regard to training at all levels. It was noted that responsibility within the United Nations family for these activities fell largely within the sphere of the responsibilities of UNESCO and ILO. It was also noted that while comprehensive reviews were in progress pursuant to a General Assembly resolution, it had not proved possible for ILO and UNESCO to prepare papers for the second session of the Committee. The representative of UNESCO gave an account of the activities being carried out by his organization. The Committee requested that papers should be prepared on problems of industrial training at all levels for its next session.

22. The delegate of the Union of Soviet Socialist Republics recalled an offer it had made to provide facilities for the setting up of a centre for the training of middle-grade technicians, capable of accommodating 800 students, half in the field of mechanization of agriculture and half general engineering. The Committee welcomed this offer and requested the Executive Secretary, in consultation with other appropriate United Nations agencies and interested governments, to take the necessary steps towards the setting up of this centre.

(i) **Co-ordination of standardization in Africa**

23. Several delegates drew attention to the need to co-ordinate standardization in Africa, in particular the main standards applicable to energy, transport, basic materials, manufactured goods, machinery and equipment.
It was agreed that the benefits of such co-ordination would be felt at several levels.

24. The Committee requested the Executive Secretary to undertake a preliminary study describing the present situation in the field of national standardization and the work already achieved or envisaged by African institutes for standardization, reviewing the experience of other regions and suggesting a suitable order of priorities and a phased programme of work in close collaboration with the governments and interested international organizations. It was further requested that a priority list of products to be standardized should be drawn up, such products corresponding to the requirements of accelerated industrialization in Africa. In this connexion, it was stressed that standardization should not mean discouragement of new industries in Africa but should contribute to the industrialization effort, inter alia by facilitating the importation of capital equipment. It was noted that to carry out such investigation it was necessary for the Executive Secretary to engage a consultant for one year at an approximate cost, including travel to selected African countries, of US$ 24,000.
25. The Working Party on Transport met for the first time on 5 December 1963 with Mr. A.J.C. Small of Tanganyika as Chairman.

26. Discussion commenced with the consideration of ECA paper E/CN.14/TNR/46: "African Transport Development Study: Progress Report". Economic Commission for Africa's sub-regional approach was accepted and it was generally agreed that sub-regional conferences to discuss various subjects of interest to sub-regions should be held as well as a general African transport conference.

27. A programme of work was requested for the future as planned by ECA. The programme should include a general over-all transport plan for the entire African region, emphasizing sub-regional approach, the completion of missing links and the co-ordination of all media of transport.

28. The general principles included in the paper were adopted. It was agreed that transport should be approached on three main fronts:

(a) Air transport;
(b) Maritime transport including ports.
(c) Inland transport, including:
   (i) Roads;
   (ii) Railways;
   (iii) Inland waterways.
(d) Study of co-ordination of means of transport.

29. The following method of approach was suggested:
(a) Inventory of existing and planned transport facilities;
(b) Studies of possibilities of improving the facilities to meet anticipated increases in demand;
(c) Studies of the completion of missing links;
(d) Consideration of problems according to priorities in each field.
30. It was further agreed that sub-regional papers should always be submitted to the relevant sub-regions for comments before being submitted to a general African conference.

31. A Sub-working party on air transport was set up to examine paper E/CN.14/INR/43, "Air Transport Study". Its report is attached as annex VI, and shows its recommendations.

32. Secretariat paper E/CN.14/INR/44 "The Transit Problems of the Eastern African Land-locked States" was presented but time did not allow for a full discussion.

33. Secretariat paper E/CN.14/INR/45 "Economic Aspects of Tourism" was discussed and agreement was reached that tourism should continue to be studied in its various aspects and implications; it should also be discussed within the framework of the Standing Committee.

34. The Working Party agreed that the problems of trans-Sahara transport should be studied with the understanding that the availability of transport through the Sahara would stimulate trade and the exploitation of the natural resources. Present trade figures should not be used as the final criterion on the subject. Algeria offered to submit copies of its studies on the trans-Sahara transport problems to the secretariat and it was agreed that the whole question should be restricted in the first instance to the countries affected. To this end a meeting of interested countries is to be held early in 1964.

35. It was suggested that ports should be studied along with maritime transport. As for pipelines, a study on the subject was not of immediate priority to all African countries but the secretariat should retain interest in it.

36. A report in the form of a statistical bulletin on all modes of transport should be published including up-to-date maps.
37. The Working Party on Natural Resources met from 5-10 December with Mr. Chandi Inani (Tunisia) as chairman.

38. The following papers were introduced by the secretariat and discussed: E/CN.14/INR/32, 33, 34, 36, 38, 39 and 40.

39. Following the introduction of each paper, discussions took place and after the exchange of views between the delegates, the Working Party agreed to transmit the following concrete proposals on natural resources to the Standing Committee for their inclusion in its recommendations:

(a) General

40. The Working Party strongly urged all member States to answer the questionnaires on cartography and minerals and hydrology circulated by Economic Commission for Africa for the advancement of all Africa.

(b) Energy

41. The Working Party after having discussed the report of the African Electric Power Meeting, which was held in Addis Ababa from 21-31 October 1963, commended the participants on the high scientific and technical value of their work and adopted with some additions the recommendations of this Meeting presented in paper E/CN.14/INR/32, to be included in the programme of work of the Economic Commission for Africa secretariat regarding energy.

(c) Cartography

42. The Working Party, having studied the report of the United Nations Regional Cartographic Conference for Africa (E/CN.14/INR/40) held in Nairobi from 1-12 July 1963, commended the participants on the high scientific and technical value of their work and endorsed the recommendations of this Conference.
43. The Committee further adopted two additional recommendations:

(i) Concerning resolution 12 of the Conference on common centres of specialized services, the Working Party recognized the urgent necessity of establishing one such centre in Africa to begin with and recommended the establishment of a restricted committee made up of one or several experts by sub-region, whose terms of reference would be:

- To define the nature and scope of the tasks of a common centre of specialized services;
- To assess the means at present available with regard to the above mentioned specialized services in the various African countries;
- To make a preliminary study on the location, cost of installation and operation, and on the planning of the financing of such a centre.

The report of this restricted committee should be submitted to the governments of African countries not later than July 1965.

(ii) About resolution 13 of the Conference on the exchange of cartographic documents between governments, the Working Party requested the governments of the countries which have carried out cartographic work in Africa or which possess advanced technical means in this field, to establish co-operation by means of the exchange of cartographic documents capable of contributing to the economic development of Africa, and invited the secretariat of the Economic Commission for Africa to take all necessary steps in order to promote and facilitate such co-operation.
(d) Mineral resources

44. The Working Party proposed a programme of work in the field of mineral resources development, which was included in the over-all work programme (see annex VII).

(e) Water resources

45. The Working Party noted the statement of the WHO representative on the activities of this organization in the field of hydro-meteorology and noted with satisfaction the declaration of the Secretary General of WMO to the effect that he welcomed any move aimed at ensuring the closest collaboration between ECA and WMO.

46. The Working Party took note of the statement of the representative of WHO expressing WHO's interest in all national planning involving development of water supplies, for all purposes, in view of the fact that in Africa every move to control and develop water resources for the benefit of the people is fraught with possible danger to their health.

47. The UNESCO representative presented the delegates with copies of the following papers:

- Bibliography of African hydrology, published by UNESCO and prepared by UNESCO with the assistance of CCTA.
- A note on natural resources, scientific and technological development.
- A report on the International Hydrological Decade.

48. The Working Party noted with satisfaction the existing co-operation between ECA and UNESCO.
49. The meeting noted with interest the statement of the representative of IAEA in respect of the application of isotope techniques in hydrological investigations.

50. As a result of its discussions, the Working Party on Natural Resources recommended a programme of work in respect of water resources development which was included in the over-all work programme (see annex VII).

Programme of work and priorities

51. The Committee adopted its programme of work and priorities for consideration by the Commission at its sixth session and recognized that this programme could not be completed in one year but covered a full two year period, with possibly some items requiring completion in 1966. The work programme as adopted is attached as annex VII.

52. In the course of discussions, most delegations drew attention to the need to find ways and means to establishing closer contacts between sessions among the delegations and the secretariat. Attention was drawn to the rapporteur system used successfully in other regional commissions, such as the Economic Commission for Europe. It was felt that at the present stage, it would be useful for each government to designate liaison officers in each of the three main fields of the Committee's work: industry, transport and natural resources, who could be the main points of contact between governments and the secretariat.

53. With the same end in view, the Committee requested the Bureau elected on 4 December 1963 to meet in June 1964 under the responsibility of its Chairman, preferably in Algiers, to:

(a) Review with the secretariat the work carried out during the first half of 1964;

(b) Take the necessary steps towards the implementation of the remaining part of the work programme.
The Committee requested the Chairman to report at the opening of the next session.

54. Furthermore, many delegations expressed the view that a critical review and reappraisal of the programme and the procedures of ECA in the field of industrialization were necessary. An opportunity for such a review and reappraisal should be offered, through inviting all member countries of ECA to submit in writing their observations and propositions in this respect through the secretariat to a special ad hoc committee composed of the bureau of the Standing Committee on Industry, Natural Resources and Transport, together with the following countries: Congo (Leopoldville), Ghana, Madagascar, Mali, Senegal and the United Arab Republic.

55. The ad hoc committee would meet for one week before the sixth session of ECA, summarize the country contributions and add any comments or propositions it felt necessary. The report of the ad hoc committee would be considered as an integral part of the report of the Standing Committee to the Commission at its sixth session.

Timely availability of documents in both languages.

56. At the request of several delegations, the secretariat committed itself to take all necessary steps to ensure that in the future all the documents required by the Committee be drafted and available both in English and French. The Committee noted the will of the Commission to provide the same instruments to all delegations. In order to ensure the maximum efficiency of the Committee’s work, these documents should be ready in both languages and despatched to the member countries of ECA at least six weeks ahead of each session, in accordance with the Commission’s regulations.

Schedule of meetings

57. The Committee decided on the following programme of meetings, the dates indicated being provisional. It recognized, however, that it
might not be easy to hold so many meetings in the period in question and that, therefore, the Executive Secretary should have flexibility to make changes and also to extend the time span of the programme, should this prove necessary. It also urged that additional resources should be made available for the purpose of servicing meetings regarded as essential, particularly translators, interpreters and other subsidiary services.

**Industry**

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<tr>
<td>Iron and steel, West Africa</td>
<td>June-September 1964</td>
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<td>Chemicals and fertilizers</td>
<td>July 1964</td>
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<td>Textiles</td>
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<td>Industrial estates</td>
<td>Late 1964</td>
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<td>Regional iron and steel conference</td>
<td>First half 1965</td>
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<td>Engineering and other metals</td>
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<td>Regional industrial symposium</td>
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**Transport**

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<td>Sub-regional conference, East Africa</td>
<td>Autumn 1964</td>
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<td>Sub-regional conference, North Africa</td>
<td>Early 1965</td>
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<td>Pan-African civil aviation conference</td>
<td>1965</td>
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<td>Trans-Sahara Transport</td>
<td>May 1964</td>
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<td>Pan-African general transport conference</td>
<td>1965</td>
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<td>Maritime transport and ports</td>
<td>1966</td>
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<td>Pan-African convention on transport legislation</td>
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**Natural Resources**

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<th>Time</th>
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<td>(a) Energy</td>
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<td>International meeting on petroleum and gas</td>
<td>First half 1965</td>
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Sub-regional meeting on electric power, West Africa  
Early 1965

Sub-regional meeting on electric power, East Africa  
1966

Sub-regional meeting on electric power, North Africa  
1966

Second African Electric Power conference  
1967

(b) Cartography

Meeting of experts on setting up of training centres for aerial surveys  
Second half 1964

Meeting of experts on joint centres for specialized services  
Early 1965

Second African regional cartographic conference for Africa  
1966

(c) Mineral resources

Conference on mineral exploration, production and beneficiation problems  
1965

(d) Hydrology

Seminar for administration on the development of groundwater  
1964

Seminar on the construction and management of small water storage works  
1965

Seminar on legislation and public administration of water resources development for government officers concerned with this subject  
1966

Date of next meeting

58. The Committee recommended that its next session be convened at the end of 1965.
ANNEXE I
LIST OF PARTICIPANTS
LISTE DES PARTICIPANTS

Chairman/Président
Vice Chairman
Vice-Présidente

Member Countries
ALGERIA/ALGERIE

Mr. M. ABDELKADER (Algeria)
Mallam I.M. DAMCIDA (Nigeria)
Mr. A.J.C. SMALL (Tanganyika)
Mr. C. TNANI (Tunisia)

Mr. M. ABDELKADER
Directeur général adjoint
l'Office national des transports
Alger:

Mr. A.J. BECKOUCHE
Chef Division développement industriel
Alger:

Mr. R. ABDELGHANY
Direction économique, Affaires étrangères
Alger:

BECHUANALAND

Mr. M.O.S. HAWKINS
Assistant Secretary (Development)
Bechuanaland Protectorate

Mr. J.J. HEARNSHAW
Head, Hydraulics Branch
Public Works Department
Bechuanaland Protectorate

CONGO (Léopoldville)

Mr. A. VAES
Conseiller technique
Léopoldville

Mr. R. TSHIMANGA-DIKENIA
Chef de bureau du Ministère du plan
Léopoldville

Mr. S. TSHIMANGA
Léopoldville

Mr. J. SIMON
Conseiller technique
Léopoldville

/...
DAHOMEY

Mr. O.R. LOKO
Directeur adjoint des affaires économiques
Cotonou

ETHIOPIA/ETHIOPIE

Ato TEKLE HAIMANOT GEBRE-MARIAM
Director-General
Ministry of Commerce and Industry
Addis Ababa

Ato Assefa TELAHOUN
Deputy-Director-General
Ethiopian Electric Light and Power Authority
Addis Ababa

Ato Mebratu GEBRE-KIDAN
Civil Engineer
Water Resources Department
Addis Ababa

Ato Ezra K. GEBRAT
Economist
Ministry of Commerce and Industry
Addis Ababa

Ato Gebre-Michael PAULOS
Economist
Ministry of Commerce and Industry
Addis Ababa

Ato Telahun BIRHU
Ministry of Communications
Addis Ababa

Ato Yacob ZANIOS
Ministry of Communications
Addis Ababa

Ato Woldesenbet YIRGE
Chief of Research and Publicity
Addis Ababa

Lt. Lakew BERHANE
Department of Marine
Addis Ababa
FRANCE

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ANNEX II

AGENDA

1. Opening addresses
2. Election of officers
3. Adoption of the agenda

Plenary

1. Provisional report of the West African Industrial Co-ordination Mission
2. Provisional report of the East and Central African Co-ordination Mission
4. Progress report on continuing items of the work programme on industry
5. Progress report on ad hoc projects
6. Industrial research and training—excluding professional training in the field of industry and natural resources
7. Programme of work in the field of industry, natural resources and transport

Working party on industry

1. a. Report of the Monrovia Conference on the possibilities of establishing an integrated iron and steel plant in West Africa

b. The present position and prospects of the iron and steel industry in Africa

c. Report on the Lagos Conference on iron and steel industry in West Africa

2. Industrial legislation
3. Capital supply for industrial development
Working party on natural resources


2. Progress report on mineral resources

3. Hydrology
   (a) Progress report
   (b) Water Resources Development Decade
   (c) Possibilities of co-operation and co-ordination of effort
       between agencies and institutions working in the field of water
       resources in Africa
   (d) The role of the United Nations in the field of water resources
       development in Africa (river basins, etc.)


Working party on transport

1. Transport development study; progress report
   (a) Air transport
   (b) Road transport
   (c) Railway transport
   (d) Inland waterways
   (e) Maritime transport
   (f) Ports
   (g) Pipelines

2. Land-locked States; transit problems

3. Tourism

4. Trans-Sahara transport

5. Telecommunications
Plenary

1. Any other business

2. Date and place of next meeting

3. Adoption of the report
I feel very happy to welcome you once again to this second meeting of the Standing Committee on Industry, Natural Resources and Transport. A glance at your agenda shows that you are here to examine the outcome of the recommendations given by your Committee last year, and to review the progress reports on the various tasks which you had entrusted to the Executive Secretary of the Economic Commission for Africa.

I need hardly stress the timeliness and vital importance of your meeting here in Addis Ababa, at a time when we are all preparing ourselves for the forthcoming meetings of the Economic and Social Commission of the Organization of African Unity as well as the United Nations Conference on Trade and Development which is to be held in Geneva early next year.

I feel confident that your studies and deliberations here will serve as a useful preparatory ground for those two later meetings, which are so important to the development of our own continent and of the other developing regions of the world.

Your Committee has been given very wide terms of reference and you will no doubt during the coming days attempt to tackle some of the difficult and complicated problems that fall within the extensive field of your interest.

It seems to me that the very name by which your Standing Committee is known best summarizes the objectives which you should strive to attain and the task that you are required to accomplish.

Under the term "Natural Resources", you will have occasion to examine the ways and means by which the vast potential of this great continent can be ascertained.

It is not enough to say that Africa is a potentially rich continent. We do not as yet have any systematic inventory of our vast resources, and it is obvious that we should know what we have in order to be able to develop and mobilize our resources in a rational way.
Similarly under the heading "Industry", would come all the problems connected with the training of technicians, studying market conditions and in short exploring ways and means which can enable us to create a sound basis for economic growth and self-sufficiency.

When the first meeting of your Standing Committee was convened here in Addis Ababa, I said in my opening message that without a rapid process of industrialization, the economic development and the consequent improvement of the standard of living of our peoples would be impossible to achieve.

But industrialization implies regional and continental co-operation. Certain forms of industrialization may be difficult or even impossible for individual countries to carry out by themselves but by pooling our resources and merging our markets we can certainly overcome the obstacles and problems created by the economies of scale.

Of equal importance is the creation of high and middle grade technicians who are so vital in any programme of development and industrialization.

During your last meeting here the role of the United Nations in the training of technicians was rightly emphasized, and this because experience has shown that in the absence of proper training programmes and institutions, economic plans and projects become but day-dreams.

The same observations can be made about the item "Transport". Our rivers must be harnessed not only to generate power but also to control floods, to provide constant means of transport and to irrigate waterless wastes. But this again cannot be undertaken by our respective countries individually. It requires our best efforts put together.

Even at this stage of our history and development - a stage when we are able to decide our own destiny - it would seem rather strange that whenever we wish to visit or to send cables to each other's countries, we often find it shorter to go to or through Europe and then back to Africa. This again calls for the co-ordination of our best efforts in order to shorten the physical distance between our peoples.
Finally, I must say that your present meeting is more significant than the previous one in that this time, you are gathered here after the signature of the historic Charter of African Unity.

Since this Charter was signed in this very city of Addis Ababa and in the very Hall where you are meeting here today, I feel confident that your deliberations will be guided by the same spirit which inspired our leaders to conceive and realize the historic unity of our great continent.

The Standing Committee on Industry, Natural Resources and Transport being one of the most important organs of the Economic Commission for Africa it would not be an exaggeration on my part to say that this Committee is one of the principal instruments in the achievement of the economic objectives of African unity.

It is only right and appropriate for me to refresh your memory by reference to the Addis Ababa Summit Conference's resolution regarding co-operation in economic development. It was stated last May here in this very Hall that African countries should pool "their resources and harmonize their activities in the economic field". It was further declared that there was need for the "joint utilization of river basin resources, the co-ordination of means of transport and communication systems, and the provision of research facilities" in order to stimulate economic growth.

The Economic and Social Commission appointed by the Summit Conference of Independent African States is going to have its first meeting next week in Niamey, Niger, and I hope to represent my country at this important meeting for African economic co-operation and development.

I believe that it is the task and responsibility of your Committee as it is of the Commission to help translate into reality the spirit and ideals embodied in the historic Charter of African Unity.

You have the necessary legal and political framework for promoting regional co-operation in Africa. It is your duty to find and recommend the ways and means by which these high ideals can be achieved in an efficient and co-ordinated manner.

Allow me to end my brief address by wishing you success in your work and the best of luck.

Thank you.
ANNEX IV

STATEMENT MADE BY MR. A.F. SWING, DIRECTOR,
ECONOMIC DEVELOPMENT DIVISION, AT THE OPENING SESSION

I should like to extend to all of you a warm welcome on behalf of Mr. Robert Gardiner, the Executive Secretary. Mr. Gardiner has been attending a number of major meetings, including ECA's Standing Committee on Trade. He is expected to return to Addis Ababa tomorrow and is, I know, looking forward to meeting you all. We are fortunate in that we shall be joined by Mr. Abdel Rahman, the United Nations Commissioner for Industrial Development. May I extend our warm thanks to His Excellency Endalkachew Makonnen for his encouraging and dynamic address on behalf of the Imperial Ethiopian Government.

Until eighteen months ago, industry, transport and natural resources was a Cinderella in the ECA family. The first meeting of your Committee was held almost exactly a year ago and you laid down, in the light of our first study, "Industrial Growth in Africa", a detailed and ambitious programme of work. But you did more than this. You also established a philosophy and an outlook, coupled with a determination that the time had come for a real move forward in the industrial development of Africa.

The main task before your second session is to take stock of what has been done in the last year and to lay down the next steps. I would like, in these opening remarks, to review briefly what has been done, to draw attention in the light thereof to the principal papers before you, and to indicate what is in the pipeline.

Conforming to your decisions a year ago, the heart of our industrial programme is assistance in the building up of large scale industries strategic for economic development, requiring markets beyond the scope of single countries and, therefore, sub-regional co-ordination. We are tackling this tremendous problem in two ways - two prongs of a single fork. The first is the industrial missions we have sent and are sending to three sub-regions of Africa. Interim reports from the missions to West Africa and to East and Central Africa are before you this week, and a similar
mission is going to North Africa at the beginning of next year. We plan to produce the final reports of the first two missions for the sixth session of the Commission and we hope to produce at least an interim report of the third mission by the same time. We shall by then have covered most African countries. It may be, however, that Cameroun, the Central African Republic, Chad, Gabon, Congo (Brazzaville) and Congo (Léopoldville) would find a similar mission convenient at a later stage. These are bold ventures and we are under no illusions as to the difficulties involved in implementing a co-ordinated programme of industrial development. History in this field does not show any grounds for optimism. Why should Africa be different? Yet we feel there are grounds for real hope. The sheer necessity for co-ordination, if there is to be real and rapid industrialisation, is evident. Africa can learn from the mistakes of others. Above all, the Addis Ababa conference has given a tremendous impetus to efforts of this kind. There are now in front of the governments of West, East and Central Africa concrete suggestions, we believe for the first time, for a bold co-ordinated programme. Manifestly, there is infinite room for discussion and negotiations. The next step lies with the governments concerned, but there is much we can do to follow up these reports if the governments concerned so wish.

The other prong of this part of our programme is the studies being carried out in depth on the key industries, studies with the sole objective of bringing the countries concerned around a negotiating table. You have before you the report of the meeting in Monrovia on the establishment of a large integrated iron and steel works in West Africa. The first results are encouraging. More detailed work is now in hand and we look forward with hope to the second meeting on this problem, provisionally scheduled to be held in Niamey next April, when we believe an agreement on the location of this plant and all that goes with it can be reached.

There are similar possibilities in other parts of Africa to which attention is drawn in a paper before you on the present position and prospects of the iron and steel industry in Africa, and also in the report of the East and Central African mission.
Another industry we are studying in depth is the chemical and fertilizer complex. Both the mission reports have tentative proposals in this area and it is clear that the possibilities of Africa moving rapidly into the chemical field are very great. Our studies are continuing and we are aiming at a meeting in the course of 1964 on chemicals and fertilizers in West Africa. There are also, as is again demonstrated in the mission reports, real possibilities of moving in the engineering field. Here again our studies continue, with the objective of a meeting perhaps on a regional basis early in 1965.

Our survey of the textile market in Africa and the immense possibilities of expanding production is well advanced, and a meeting, again on a regional basis, is planned for 1964.

I would like to draw attention to two other subjects you will be discussing, on which papers have been prepared. One is industrial legislation. We have prepared a basic survey and made suggestions for future work. The other is industrial research and training. This is a vast field where we join forces with the Industrial Development Centre and the specialized agencies concerned, particularly UNESCO and ILO. Here again, we have put forward proposals for your consideration.

Looking to 1964 and early 1965, two other meetings are planned, both in co-operation with the Industrial Development Centre. One is a seminar on industrial estates and the other on industrial programming. Seminars in both these fields have been held with success in other regions, upon whose experience we wish to draw.

Turning now to energy and natural resources, the report of the first African Electric Power Conference is in front of you. This was most encouraging, both in attendance and in the animation and practical character of the discussions. An extensive but we believe realistic programme of work has been drawn up. We propose, if the Committee agrees, to hold a conference along similar lines, dealing with oil and natural gas, early in 1965.
The first regional Cartographic Conference for Africa was held during this year, again well attended, and we have established an effective cartographic unit. Similar units have been established for minerals and water, which we plan to build up as rapidly as resources are available, and an integral part of which is advisory services. We are in a position to advise in maintaining or developing surveying activities in both these fields, but the main emphasis is on development of Africa's abundant mineral resources and in the proper utilization and development of surface and ground water. A seminar on ground water is planned for 1964. We are also beginning to play a part in assisting in the multi-purpose development of international rivers and river basins.

The third area within your terms of reference is transport. Two notable events during the last year have been agreements reached with ICAO and ITU on the co-ordinated development of air transport and communications, respectively. Some specific transport studies requested have been completed. Our main effort is going into a major study of transport development problems, which we are building up on a sub-regional basis. Here again, the emphasis is not on academic surveys but on the working out of practical proposals for consideration by the governments concerned for the development of transport facilities on a co-ordinated basis, co-ordinated in the dual sense of among forms of transport and among countries. A meeting on West African transport is planned for the middle of 1964, and another on East and Central African transport for the end of 1964. In this field one other project should be mentioned, a study of trans-Sahara transport. We hope our work will have reached a sufficiently advanced stage for a meeting of the countries concerned not later than the middle of 1964.

I have referred already to our advisory services, largely through regional advisers attached to us and financed under the United Nations Technical Assistance Programme. We hope and believe that governments wish to draw increasingly on the services of a team of specialists we are building up. We already have advisers in minerals, water, cartography, transport, and expect to add more in 1964 and to cover also industry and energy.
A cross reference might be appropriate here to building and building materials. I have made no reference to our work on housing, building and planning since, as you know, there is a separate Standing Committee in this field. But we also have regional advisers in this area available to help interalia in the building and building materials field.

There is one more aspect of our work to which I would like to refer, which is growing in importance. Virtually all the so-called regional programmes under the United Nations Technical Assistance Programme are now administered by ECA. We are now, however, playing an increasing part in assisting governments in both the planning and execution of country programmes and are performing similar functions in relation to the activities of the United Nations Special Fund.

I have given you in a necessarily summary account an idea of what we have been doing and our plans for the next year or so, all of which derive from decisions you have already taken. We believe we have now established and begun to carry out a programme of work in the area which is the responsibility of your Committee. We have also built up the division of the secretariat whose task it is to service you. We are well aware of how much has still to be done, and of the fact that our contribution can be at best a small one, unless our resources can be expanded. At the same time, new prospects have been opened up in the last year by the increasingly intimate co-operation we have been fortunate in establishing with the United Nations Industrial Development Centre and the specialized agencies who have each, in their different spheres, an important part to play in this common effort.

May I, on behalf of the Executive Secretary and all my colleagues directly concerned with your work, wish this meeting every success.
STATEMENT BY DR. I.H. ABDEL-RAHMAN, COMMISSIONER FOR INDUSTRIAL DEVELOPMENT OF THE UNITED NATIONS TO THE STANDING COMMITTEE FOR INDUSTRY, TRANSPORT AND COMMUNICATIONS OF THE ECONOMIC COMMISSION FOR AFRICA GIVEN IN PLENARY SESSION HELD ON 9 DECEMBER 1963

I consider it particularly significant to have the privilege of attending this meeting almost at the very outset of my tour of duty with the United Nations. It is not only a matter of personal satisfaction derived from the fact that I am from an African country myself; I have in mind especially the fact that the problems of African development have become now a matter of special concern of the United Nations and are one of the foremost preoccupations of its deliberative and executive bodies.

Last year, when he addressed this Committee, my predecessor, Jose Antonio Kayobre, had very aptly described the complexities involved in industrialization and mentioned the possibility of a variety of approaches to deal with the multiple aspects of industrial development. Needless to say, the process of industrial development has not become any simpler during the last year. If anything, further studies and explorations of these problems have revealed in broader outline the numerous and far-reaching interrelationships between the various aspects of industrial development. Thus, the picture is perhaps even more complex and the need for clearly defined lines of action more urgent than ever.

This is not meant to imply that we are unaware of the progress made in many developing countries towards achieving higher rates of industrial output and in undertaking new industrial projects which are bound to make a solid contribution to the diversification of their economies.

As far as the work of the United Nations itself is concerned the important role of industrialization as a key factor in economic development has been further emphasized and the highest priority has been attached by the member countries to the need for increased efforts in this field. Work has continued on the large variety of subjects comprised in this field and a number of good starts have been made in several new directions. I shall
not refer specifically to the work carried out by the Economic Commission for Africa which is well known to you. The variety of projects in the field of industry undertaken by your regional commission and the energy and drive devoted to their implementation is amply shown in the documentation before this Committee and, in my view, reflects a highly commendable attempt to respond to the urgent needs of the African countries and the natural impatience with which they regard the pace of developments in this field.

The Centre for Industrial Development has supported the work of the regional economic commissions in general, and of the Economic Commission for Africa in particular. It continues to serve countries in the various regions through the existing programmes of technical cooperation, the organization of seminars and technical meetings, and carrying out of research projects on some of the basic problems of industrial development which are largely common to the developing countries in the various regions. Whenever possible we have participated and will continue participating with the Economic Commission for Africa in carrying out jointly projects of particular interest to the African region. An example of this kind of joint undertaking is the Seminar on Industrial Estates in Africa which will convene next June, here in Addis Ababa. Similarly, direct cooperation is also involved in the organization of inter-regional meetings such as the Inter-regional Symposium on Iron and Steel which was held last month and three inter-regional seminars scheduled for next year in the fields of petrochemical industries, industrial complexes and the establishment and operation of cement plants.

In our relations with the regional commissions it has been the policy of my predecessor to give full effect to the principle of decentralization, which I intend to continue without reservations. I am fully convinced that projects of regional interest or requiring implementation at a regional level should be handled by the regional economic commissions who are closer to the problems in hand and to this effect the Centre for Industrial Development is fully prepared to lend its support and the assistance of its resources to the regional secretariat. However, our relations are not
limited to questions of mutual support and assistance. What is more important, perhaps, is that we continue developing the habit of team-work to a point where all our activities are truly part of a coordinated effort to accelerate the industrialization of the developing countries.

As a matter of overall policy we have naturally tended to concentrate on key impact areas where our own limited resources could be utilized more effectively. Industrial programming and assistance to governments in formulating appropriate industrialization policies continues to be a major preoccupation. In addition to the problems and techniques of industrial programming, we have undertaken the preparation of a set of pre-investment manuals for a number of key industries. When completed, these manuals or "industry profiles" should make available to officials in developing countries concerned with industrial planning and the formulation of industry projects, basic data on factor proportions for such industries as fertilizers, aluminium, cement, iron and steel, heavy chemicals, machine tools, etc.

A major and new direction of our efforts during this last year has been imparted by the forthcoming United Nations Conference on Trade and Development. We have been working on a number of problems relating to the expansion of exports of manufactured and semi-manufactured goods from developing countries. These studies are concerned particularly with the role of industrial exports as a major means for overcoming the smallness of the domestic market in developing countries with its attendant limitation upon their industrialization prospects. Measures are contemplated for increasing exports of manufactured goods already produced in the less-developed countries and the prospects of establishing new export industries in response to expanded export markets. The Conference itself is expected to lead to the adoption of some of these measures or perhaps to a set of measures involving steps by developed countries as well as measures taken by developing countries to promote their exports in the form of special subsidy schemes and mutual financial assistance.
It has been many times argued that while the developing countries are starting their industrialization a century or more too late, they have the advantage of being able to utilize from the start the most modern technology. We know, however, from experience that the transfer of industrial technology, which is practically synonymous with industrial development at large, is in no way a simple undertaking. It is intimately bound up with the vast array of conditions required for successful industrialization. For one thing modern equipment is expensive and requires large capital outlays. Setting up modern production facilities requires further technical and other trained personnel to handle production, organization and marketing. One could continue enumerating more and more factors, such as infrastructure requirements, markets, the problems of external economies, etc. to end up with the full transformation of the environment which has been characteristic of the process of industrialization.

Again, to single out some key areas, after the elaboration of projects, the preparation of blueprints and pre-investment studies, the need for capital for establishing the production facilities proper, still looms as a major problem of development. Industrial financing has been a matter of considerable concern to policy makers at the national level and a subject closely considered by international bodies. We have undertaken in the past a longer-range survey covering broadly the requirements and availability of funds for industrial financing from external and internal sources.

At its 17th session, the General Assembly approved a resolution on the role of the United Nations in training technical personnel for the accelerated industrialization of the developing countries. The Assembly recognized that the training of such personnel should be an integral part of national economic and social development programmes, and should take into account both current and long-term needs for specialists. It also recognized that these training activities should be carried out as far as possible in the developing countries themselves.
There has been a growing awareness that the progress of the less-developed countries will require a great deal of human talent and technical competence of a high order. There can be no doubt that one of the essential conditions for industrial development is the creation in the developing countries of adequate cadres of technicians, managers and specialists in the various branches of industry. The training of such cadres must continue to be one of our major preoccupations.

A major event, in the field of adaptation and transfer of modern technology proper, has been the recent United Nations Conference on Science and Technology, whose primary purpose was to promote the mobilization of the world's technical and scientific knowledge for early and practical application to the problems of development and the achievement of speedy international diffusion of newly acquired knowledge. While the conference has been useful in drawing attention to the need for directing scientific and technological endeavours to the specific needs of developing countries it is perhaps too early to evaluate fully its practical implications which, in the final analysis, will depend on follow-up actions to be taken by both national and international organs.

Such follow-up action for a specific sector was provided by the Inter-regional Symposium on Iron and Steel, organized jointly by the Centre and the regional economic commissions, which was held last month. At this meeting a vast amount of technical and economic data on steel-making was made available to officials from developing countries, who also had an opportunity to discuss experiences with some of the foremost specialists in the field and inspect steel producing units in various European countries. Particular attention was devoted to new technological developments which enable the construction and economic operation of steel plants of relatively small capacities thus providing a solution to some of the problems of the limitations of markets in developing areas. The final analysis of the results of the seminar is not yet available but the tone of its discussions indicates that the technical problems of relatively small-scale steel production have been largely solved and
indeed have already found a number of applications. This is now a case
where the technology is available and where the remaining problems are
those of applicability within the context of a given programme of
industrial development and the adaptation to local circumstances.

One of the immediate purposes of our programme in the field of
transfer and adaptation of industrial technology is to create a minimum
of technical capacity in the developing countries so that the particular
needs and conditions of each country are fully considered when new indus-
trial ventures are undertaken and the resources of the country itself are
utilized to a maximum degree in the establishment of new productive
facilities. This involves the establishment of certain institutional
elements, such as industrial or technological research institutes where
appropriate, or, at a more immediately operational level, bureaux or
offices of industrial promotion capable of providing basic technical
support to policy makers in each country. At the country level some
appropriate machinery may be established to report periodically and
systematically about policies, achievements and problems of industrializa-
tion, including in particular the relation between industry and the over-
all plans of development. Through such periodic review and reporting aid
to industry from different sources may be better coordinated, and local
resources may be better mobilised. Again this committee may wish to
request the Executive Secretary to examine further such a proposition.
A regional study of the role of technological research institutes in Africa
which is now before this Committee, has been prepared by the Economic
Commission for Africa with the assistance of a technical adviser from the
Centre for Industrial Development, and provides a first indication of the
status of facilities of this nature throughout the region. The idea of
national offices of industrial development, capable of supporting efforts
for industrialization, deserves particular attention, and may prove to be
essential and useful in many developing countries.
These activities are indeed important, and some of them may even be essential ingredients of any effort designed to accelerate industrial growth. But as industrialization in increasingly recognized as the most potent dynamic factor in the process of economic development, there has also been a growing awareness that to achieve continued and accelerated industrialization; to impact to the process of development the kind of impetus called for by the proclamation of the Development Decade only a few years ago; and to assure the proper application of the results achieved in each one of these fields; all these activities will have to be encompassed within a more consistent general framework, they will have to be based in each country and in each region on an over-all strategy of industrialization. The need and ability to carry out individual industrial projects calls, indeed, for adequate technological knowledge, for trained personnel, for capital, markets and raw materials but its effective contribution to the final goals of development is not determined by these elements alone. It is, primarily, a function of the place that the project occupies within a consistent set of policies, which would, in turn, be based on the country's ultimate prospects of industrial development. Similarly, the set of institutional facilities and other measures designed to promote industrial growth would depend on the industrialization strategy adapted and the goals that it serves. The strategy itself could, in a sense, be defined as the optimization of the countries human and natural resource endowments and its peculiar economic advantages and disadvantages derived from such factors as geography, climate, trade relations and cooperative efforts with other countries.

On 27 November 1963, just a few days before I left Headquarters, the Second Committee of the General Assembly, which is concerned with economic and social matters, approved unanimously a draft resolution calling for an international meeting on industrialization to be held by 1966, and by which the Secretary General is requested to initiate consultation and studies with States Members of the United Nations and of the specialized agencies, and the International Atomic Energy Agency, with the regional economic
commissions and with the Committee for Industrial Development, on the
advisability of holding, not later than 1966, an international symposium,
preceded, as appropriate, by the regional sub-regional symposia, relating
to the problems of industrialization of developing countries and to
report to the Economic and Social Council at its thirty-seventh session
and to the General Assembly at its nineteenth session. This decision by
the General Assembly stems, in the first place, from the expressed desire
by the member countries of the United Nations to promote and accelerate,
by every possible means, the industrial development of the less-developed
countries. It would indeed provide, for those countries who are making
at present strenuous efforts to achieve a larger degree of industrialization,
the widest possible international forum to discuss the attendant problems;
it would also serve to focus the world's attention on the needs and problems
of industrialization and as a call to mobilize its resources for an overall
effort such as envisaged through the proclamation of the Development Decade.

Another aspect of this proposal may be the opportunity that a world
conference on industrialization would offer for clarifying the policies
and the major lines of action to be pursued at the national, regional and
international levels. Because of the need to insure that such a conference
should deal in a practical and effective manner with the problems of the
developing countries themselves, the General Assembly has wisely provided
for the possibility of holding, in advance of the world conference, a
series of regional or even sub-regional meetings at which the specific and
practical problems of the developing countries and regions could be
explored in depth and where the problems and prospects of their industrial
development could be reviewed in the first instance, so that the larger
world forum, far from skimmin over the surface, could instead take on
the concrete problems of the developing countries in a larger framework.
These problems would have been elucidated at regional meetings after
thorough and detailed review of the situation of each country, with clear
distinctions drawn between elements which are germane to specific
countries alone and those which may be common to a number of countries or
the region as a whole.
In this connection, this Committee may wish to consider the advisability of holding an African conference on industrialization in 1965, which would be preceded by appropriate meetings and studies relating to specific sectors or to specific aspects of industrialization. A meeting of ministers of industry in the African countries may be particularly useful at an early date, in order to insure and sustain full appreciation and participation in the regional conference.

Through the impetus of the Organization of African Unity and thanks to the initiative taken by many African countries, a considerable progress has been achieved during the last year in viewing African problems of development, with a clear perspective and better understanding of the magnitude and the extent of the efforts required. The proposed regional African conference on industrialization would be a useful instrument in supporting such efforts and consolidating progress.

These preparatory regional meetings will also be useful in determining and defining more closely the subjects which should be put finally on the agenda of the world conference. The same purpose will, to some extent, be served by the consultations which the Secretary General, as requested in the resolution mentioned above is bound to undertake with member countries and the international organizations to determine the advisability of holding such an international meeting. I have every reason to believe that the United Nations specialized agencies will favour the implementation of the resolution. It is our hope that these consultations will also be useful as a mutual exchange of views and as a means of providing us with a better knowledge of the situation prevailing in each country and region and the particular problems in whose solution assistance may be required from outside. It is quite obvious that to achieve an accelerated process we must start moving from the very point where we are at present. In pursuing our efforts to intensify the industrialization process of the developing countries, there has been now a growing awareness that we must come to know more intimately and more accurately the full extent of the underlying problems. I think we should be ready to explore with each country, with
groups of countries and the region as a whole the exact nature of their problems, their immediate needs, the possibilities of action at the various levels and the assistance that is available from the various international agencies and bilateral sources. In fact, I think we are coming to the realization that what we are engaged in requires us to look beyond the individual projects and concrete undertakings - which, important as they are in themselves, only represent fragments of the whole picture - towards the wider overall strategy that could really bring about a significant advance towards the goal of industrial development of the now less developed areas of the world. In short, we will have to organize ourselves so as to be instrumental in matching the demand and supply sides of a vast variety of needs and services. Only through an attack along the whole front can we attempt to effect a significant change in the present division of the world in developed and less developed countries.
ANNEX VI

REPORT OF THE SUB-WORKING PARTY ON AIR TRANSPORT

A Sub-Working Party on Air Transport, met on Friday 6 December 1963 with Capt. P.A. Travers as Chairman.

1. Paper 3/CN.14/INR/43 was considered and it was agreed this well prepared and detailed study be used as a basis for the preparation of similar surveys of the West African and North African sub-regions. The Sub-Working Party, however, considered that the following additional information was necessary before full consideration could be given to the efficient co-ordination and integration of air transport within and between sub-regions:

   (i) Figures of traffic; passengers, mail and freight flowing across the boundaries of the territories forming the sub-regions and intra-sub-regionally;

   (ii) Information concerning the present facilities available in the field of air navigation;

   (iii) Information regarding the category and facilities available at the main airports in each sub-region;

   (iv) Details of the Flight Information Regions in each of the sub-regions.

2. The Sub-Working Party noted:

   (i) A statement by the secretary that the information referred to in paragraph I (i) was difficult to obtain from some governments;

   (ii) That the information referred to in paragraph I (ii), (iii) and (iv) was available from ICAO.

3. The Sub-Working Party:

   (i) Recommended that the Economic Commission for Africa undertake as soon as possible, in cooperation with ICAO, an air transport study...
of the West and North African sub-regions on the basis of paper 3/CN.14/INR/43, together with the additional information set out in paragraph 1, sub-paragraphs (i), (ii), (iii) and (iv) of this report.

(ii) Considered that the information on traffic flows referred to in paragraph I (i) was essential to a proper study of the requirements for the integration and co-ordination of air transport within and between the sub-region, and

(iii) Recommended that Governments make this information available on a confidential basis to ECA who would not circulate it without the permission of the member States.

4. The Sub-Working Party also considered that the development of African air transport services within and between the sub-region would require a measure of protection, certainly in the initial stages, from excess capacity provided by non-African air operators over sectors vital to the development of African air transport, and recommended that governments maintain the closest possible liaison and co-operation concerning the granting of future traffic rights between points in the African region to non-African air operators.

5. The Sub-Working Party considered the question of pooling of air services and aircraft spares and felt that such commercial arrangements were a matter for airlines themselves, nevertheless it recommended that governments should encourage such arrangements between African airlines provided that the arrangements were designed to reduce wasteful competition, bring about a reduction in the costs of operations and at the same time give a balanced service to the general public.

6. The Sub-Working Party considered the establishment of central maintenance and overhaul bases in the sub-regions and recognized that the present diversity of aircraft types would make this an expensive project to set up and costly to operate. It recommended that governments urge their airlines to use the maintenance and overhaul facilities available
on the African continent to the maximum extent possible as opposed to using those in non-African countries. It was believed that by this means a gradual build up and development of central maintenance and overhaul bases would take place and eventually result in a greater standardization of aircraft types on a sub-regional and regional level.

7. The problems posed by the setting up of a central common technical services organization were considered. The Sub-Working Party agreed that the setting up of such an organization would be possible only after the establishment of central maintenance and overhaul bases in the sub-regions and therefore, recommended that, although the establishment of a central common technical services organization was a long-term project, ECA should, with the development of central maintenance and overhaul bases, study, in cooperation with ICAO and the governments, the establishment of a framework under which such an organization can be set up in each sub-region.

8. On the question of the setting up of an African civil aviation conference it was agreed that this would be desirable and even necessary. The ICAO observer stated that ICAO intended to hold a Regional Air Navigational Meeting in Africa approximately in October 1964. The Sub-Working Party, therefore, strongly recommended that the air transport studies for the three sub-regions should be commenced immediately by ECA, in cooperation with ICAO, and completed so that an African civil aviation conference could be called co-incidentally with the ICAO meeting and that, in any event, not later than December 1964.

9. In considering the purpose of the air transport studies the Sub-Working Party agreed that the object was the establishment of a co-ordinated air transport system for the benefit of the African region as a whole. In order to achieve this object the Sub-Working Party considered that financial and technical assistance would have to be made available for the following purposes:

   (a) Provision of radio navigation equipment;

   (b) Re-organization, equipping and staffing of air traffic services
units, within the flight information regions;

(o) Development of airfields.

10. The Sub-Working Party then considered the question of training. The Sub-Working Party considered that in view of the acute shortage of trained African personnel there was a very strong case for the establishment of a training school in the East and Central sub-regions covering all aspects of civil aviation training. It therefore recommended that ECA, in co-operation with ICAO, carry out a survey of the East and Central African sub-regions with a view to assessing the requirement in each field of training, the priorities involved, and the location of such a school. The results of this study should be made available to the other sub-regions.
B. Industrialization

(a) Industrial planning and projections

Group 1 - Continuing projects and activities of high priority

Origin: Report on the first session, paras. 59: Commission resolutions 18(II), 33(III) and 43(IV): report of the Standing Committee on Industry, Natural Resources and Transport.

(i) Industrial statistics, inventory of African industries and industrial reporting

Description: The collection for eventual publication of statistical data on output, imports and exports and also consumption of industrial products. The improvement of both the coverage and quality of industrial statistics. The continuing build-up of an inventory of African industries, including energy resources already being exploited or to be exploited in the near future. The preparation by African countries of regular reports on the industrial situation, progress and problems.

(ii) Industrial policies and programming

Description: Consultations with African experts, officials and ministers in the industrial field, with a view to the preparation of an African regional...
conference on industry, to be held in 1965, one of a series of regional conferences in preparation for a world conference on industry in 1966. These meetings will cover the whole field of industrial development policies and programmes, the practical problems arising and solutions thereto.

(b) Industrial development economics and policies

Group 1 - Continuing projects and activities of high priority

(i) Assistance to governments in promoting sub-regional co-operation in the development of industries

Description

Assistance to governments in promoting sub-regional co-operation in the development of industries on the basis of international specialization and in the harmonization, where appropriate, of industrial development plans through studies and field investigations.

Comment

Industrial co-ordination missions were sent to West and East and Central Africa in 1963 and one is being sent to North Africa early in 1964. It has also been recommended that similar missions should be sent to the countries in central equatorial Africa including the Congo (Leopoldville) and to Madagascar. The recommendations of these missions will be actively followed up, partly within the framework of other projects in the programme on industry and partly through the United Nations Industrial Development Centre, the United Nations technical assistance programme and the United Nations Special Fund.
(ii) Assistance to governments in technical assistance and Special Fund projects

Description Assistance to individual governments at their request in solving problems of industrial development, in co-operation with the United Nations Industrial Development Centre, including assistance to governments in the formulation of technical assistance and Special Fund projects, briefing and assisting technical assistance experts and evaluating their reports.

Group 3 - Ad hoc projects of high priority

(iii) Intensive studies of individual industries

Description Intensive studies of the following industries, covering the prospective trend of demand, trade possibilities within Africa and overseas and prospects of developing African production in individual countries, where appropriate on a sub-regional or regional basis, to be followed by meetings of experts:
(a) Iron and steel;
(b) Non-ferrous metals including further processing;
(c) Engineering industries;
(d) Chemicals, especially basic chemicals required for a wide range of industry, fertilizers and agricultural chemicals, tanning materials, dye stuffs and petro-chemicals, and including also prospects for the development of secondary industries based on the foregoing chemical products;
(e) Textiles, both from the point of view of far-reaching prospects of import substitution at the national level and with particular reference to removing obstacles to the growth of production.

Comment

These studies are in progress and will be continued in 1965. Meetings of experts designed to facilitate the setting up of new industries on a regional or sub-regional basis have been held or are planned on iron and steel, chemicals and fertilizers, engineering, non-ferrous metals and textiles.

(c) Transfer and adaptation of industrial techniques and processes

Group 1 - Continuing projects and activities of high priority

(i) Industrial research

Description Preparation, in co-operation with other departments of the United Nations and the specialized agencies concerned, for the setting up of institutes or centres for applied industrial research in Africa, where possible on a sub-regional basis, covering both applied research and development.

(d) Financing of industry

Group 1 - Continuing projects and activities of high priority

(i) Industrial investment

Description Studies of the problems of the formulation of industrial investment decisions, including:

(a) Investigation of the experience of industries established in the last few
years from the point of view of operation, productivity and economic efficiency;

(b) Research into the initiative which led to the establishment of such industries as well as methods employed in reaching investment decisions;

(c) The economic and other pre-conditions of industrial development with particular reference to specific obstacles to industrialization in particular areas;

**Comment**

This project is being geared to the industries which may be developed as a result of the industrial missions [see project II B (b)(i)]

**Group 2 - Ad hoc projects of high priority**

(ii) **Financing of industries**

**Description**

Study of the problems of financing industry in Africa, including analysis of self-financing methods, the channelling of private savings to industry through the development of capital markets, internal financing of the sale of capital goods, international financing through international agencies and other channels, and the provision of credit for the export of manufactures, in co-operation with the United Nations International Centre, the African Development Bank, other international financing agencies and private banks.

**Comment**

A preliminary paper has been submitted to the second session of the Standing Committee on Industry, Natural Resources and Transport and will be followed up by a full study.
(e) Industrial management, training and administrative problems of industrial development

Group 1 - Continuing projects and activities of high priority

(i) Technological education and training

Description Preparation, in co-operation with other departments of the United Nations and specialized agencies concerned, for the development of technological education and training, through the setting up of specialized faculties in African universities and through separate specialized technological institutes or universities, for the training of management personnel, industrial engineers, middle-grade personnel and skilled workers, in the first instance through an inventory of existing institutions; and for the training of specialists in project evaluation such as agricultural economists, industrial engineers, industrial designers, industrial economists and consultants.

Group 2 - Ad hoc projects of high priority

(ii) Industrial, commercial, monetary and fiscal legislation

Description Study of the impediments to industrialization represented by existing industrial, commercial, monetary and fiscal legislation, with a view to formulating proposals for the harmonization of such legislation, to be considered by a conference at an appropriate time.

Comment A preliminary study on industrial legislation has been submitted to the Standing Committee on Industry, Natural Resources and Transport at its second session and is to be followed up by further work.
(iii) Seminar on industrial estates

Description Preparation for a seminar on industrial estates to be held in 1964 in co-operation with the United Nations Industrial Development Centre and the specialized agencies concerned.

(f) Social aspects of industrialization

See Studies on urbanization problems [project III B (a)(i)]

C. Infrastructure development

(a) Natural resources development

Group 2 - Ad hoc projects of high priority

Origin\(^1\) Report on the first session, para. 59; Commission resolutions 18(II), 33(III) and 43(IV); report of the Standing Committee on Industry, Natural Resources and Transport.

(i) Industries providing energy

Description (a) The programme of work on electric power is set out in the report of the African Electric Power Meeting \(E/CN.14/INR/32\), paras. 28-42).

(b) Preparations for an all-African Conference on oil and natural gas.

(c) Preparation of a study with comparative analyses of the prices of electric energy on a sub-regional basis, including the breakdown of production costs, examination of sources of exaggerated prices, implication of power tariffs on consumption, appropriate measures for improvement, inter-relations with the development of the national economy, etc.

\(^1\) This origin is common to all projects under C.
(d) Supply of advice on considerations regarding new power plants, particularly the comparison of hydro-electric versus thermo-electric plants in the first line including diesel power stations.

(e) In collaboration with IAEA, assistance to member States to collect documents on development in the field of nuclear energy with a view to the future use of such energy in the African economy.

Comment

A meeting on electric power development was held in the autumn of 1963 and will be followed by sub-regional meetings. An all-African conference on oil and natural gas is planned for early 1965. With respect to

(d) The secretariat will re-elaborate paper E/CN.14/EP/5 so as to include more relevant information as reference for the consideration of new investment projects for power supply and including also the problems of long-term financing.

(ii) Water resources development

Group 1 - Continuing projects and activities of high priority

Description

(a) Arrange upon request of interested governments for the compilation and analyses of information related to the field of water resources development and water needs in African countries with a view to enabling countries to plan their water resources policy.
(b) Investigate requirements of sub-regional training programmes for technicians and arrange for such training programmes in co-operation with the specialized agencies and other organizations, such as UNESCO, WMO, FAO, IAEA and COTA.

(c) Promote the development of the African international river basins by initiating studies, meetings and by all other appropriate means.

(d) Play an active role in the execution of the priority programme of co-ordinated action in the field of water resources within the framework of the United Nations Development Decade.

(e) Follow up the activities under the programme of the International Hydrological Decade and invite the developing countries to establish the networks of their hydrological and meteorological stations according to the existing international standards and to adopt uniform standards of hydrological measurements and standard forms of records.

(f) Arrange, when appropriate, fellowships for administrators and engineers to enable them to study the achievements of countries which have been confronted with similar problems in water resources and where required arrange study tours to other countries for such specialists to visit installations on site.
(g) Keep up-to-date the bibliography of African hydrology in association with UNESCO and CCTA.

(h) Continue the issue of a four-monthly newsletter on the development of African natural resources.

(iii) Water resources development

Group 2 - Ad hoc projects of high priority

(a) Organize, in association with the Department of Economic and Social Affairs, the Specialized Agencies and other bodies concerned, a seminar for administrators on the development of groundwater.

(b) Organize, in association with the Department of Economic and Social Affairs, the Specialized Agencies and other bodies concerned, a seminar on the construction and management of small water storage works.

(c) Organize, in association with the Department of Economic and Social Affairs, the Specialized Agencies and other bodies concerned, a seminar on legislation and public administration of water resources development for government officers concerned with this subject.
(d) Explore, with the organizations concerned, the possibilities of strengthening the international co-operation and co-ordination of research in the field of African water resources development and to report on this at an appropriate time to the Standing Committee.

(iv) Mineral resources

Group 1 - Continuing projects and activities of high priority

Description

(a) The continuing build-up of an inventory of African mineral resources and analysis of development prospects, with special reference to the development of industries on a sub-regional basis and in particular to those being studied in depth.

(b) The establishment of close working relations with major regional organizations in the field of mineral resources, and with national geological surveys and mining departments.

(c) Urge upon governments the immediate and long-term needs of geological surveys as an essential basis for mineral investigation in relation to industrial development and the early publication of relative maps and records for the information of the general public and of mining companies.

(d) Assist individual governments at their request in solving problems of mineral investigation and development, ore beneficiation, etc., including assistance
to governments in the formulation of technical assistance and Special Fund projects.

(e) Advise the governments of member States to:

(i) encourage and promote economic mineral prospecting and production;

(ii) enact adequate mining legislation for this purpose;

(iii) where applicable, give special encouragement to prospecting and mining by individual and small-scale enterprises, bearing in mind the limited resources available to those compared with the resources available to large enterprises.

(f) Investigate further the setting-up of a regional centre for rock age determinations by radio-active methods and therefore to carry out a survey of existing facilities in Africa with a view to selecting the most suitable of those for the development of such a centre.

(v) Mineral resources

Group 2 - Ad hoc projects of high priority

Description (a) Organize in association with the Department of Economic and Social Affairs an African conference to be held periodically; starting in 1965 and to deal with mineral exploration, production and beneficiation problems which concern the African mining industry.
(b) Recommend to African governments that they exchange information on the mining legislation currently in force in their respective countries; make a study of the present state of mining legislation in the different African countries.

(c) Propose to the governments a scheme for the training of technicians for employment on mineral resources development, taking advantage, as a matter of priority, of the centres presently available in the sub-regions; advise the governments on the measures they should adopt to attract a greater number of candidates towards the professions concerned in the development of mineral resources.

(d) Study the problem of the uncontrolled extraction of, and trafficking in diamonds in West and Central Africa and advise the interested governments on the steps to take to normalize the situation.

(b) Development of transport and communications

Group I - Continuing projects and activities of high priority

(i) General transport development study

Description The study will continue by taking an inventory of:

(a) Existing and projected transport facilities in the region, and assessing the possibility of improving them to meet anticipated increase in demand in the light of development in industry, agriculture, mineral resources, and social and administrative requirements;

(b) Missing links, the completion of which is necessary to improve and rationalize transport.
Comment

It is intended to hold sub-regional general transport conferences in north, west and east and central African sub-regions.

(ii) Air transport

Description

(a) The study in co-operation with the International Civil Aviation Organization (ICAO), of ways and means of developing and co-ordinating all African civil aviation and air transport facilities, including studies of the feasibility of centralizing common technical services in the fields of air-worthiness, accident investigation, training of personnel and licensing of same; pooling of air services, combined ground handling; standardization of equipment and pooling of spare parts, engines and other technical services; and the possibilities for increasing use of aircraft in the transport of perishables and the stimulation of east-west and north-south intra-African trade and traffic.

(b) To study the problems of an integrated, complementary and co-ordinated air transport development plan for the entire African region.

Comment

It is intended to hold a pan-African civil aviation conference.

(iii) Maritime transport

Description

(a) The organization of coastal traffic;

(b) Establishment of a convention among interested States to facilitate shipping among them;
(c) Establishment of conventions between African maritime organizations and organizations in other continents;

(d) A plan for ship-building in Africa with special reference to the requirements of African shipping organizations; recommendations to the Industry Committee;

(e) Training of maritime operatives;

(f) The building, improvement, and administration of African ports;

(g) The standardization of unification of legislation concerning maritime transport in Africa.

Comment

It is intended to hold a maritime transport conference and a seminar on the administration of ports.

(iv) Inland transport

Description

Study the problems of co-ordinated and complementary national, sub-regional and regional development of:

(a) Inland waterways with special reference to
international co-operation in harnessing inland waterways (rivers and lakes) and the setting up of international organizations (corporations) to administer and regulate navigation on international rivers and lakes;

(b) Railways, with special reference to:

(i) The completion of missing links to improve serviceability and rationalize the systems;

(ii) Standardization of gauges, coupling and braking systems to facilitate the
supply of missing links and to moderate the costs to producing the equipment;

(iii) Complementary connexions with inland waterways and road systems;

(c) Roads, with special reference to:

(i) The completion of missing links to rationalize the systems and improve services;

(ii) Complementary connexions with railways and inland waterways;

(iii) Standardization of legislation in respect to the highway code and international carriage on transport of goods and passengers by road, and movements of vehicles between countries.

Comment It is intended to hold a pan-African convention on transport legislation and the movement of vehicles and of goods and passengers by inland transport;

(v) Telecommunications development

Description (a) Studies, in co-operation with the International Telecommunications Union (ITU) and other international agencies, of the telecommunication problems of the region;

(b) The study is proceeding by taking an inventory of existing and projected telecommunication facilities in the region and examining the possibilities of extending and improving them; and by preparing a plan of high frequency radio circuits to supplement those agreed on at Dakar in January 1964. The implementation of this
plan would eliminate the current necessity of sending via European métropoles messages between African capitals.

(vi) **Co-ordination of modes of transport**

Description: Study the co-ordination of all modes of transport with a view to eliminating wasteful aspects of duplication and inter-media competition.

(vii) **Trans-Sahara transport problems**

**Group 2 – Ad hoc projects of high priority**

Description: A special study of the trans-Sahara transport problems.

D. **Mapping and surveying**

**Group 1 – Continuing projects and activities of high priority**

(i) **Regional cartographic conference for Africa**

**Origin**

Report on the third session; ECOSOC resolution 816(XXXI); resolution 1 of the first United Nations Regional Cartographic Conference for Africa (1963).

**Description**

Consultation with governments and interested inter-governmental organizations regarding the meeting place and provisional agenda of the second United Nations regional cartographic conference for Africa, to be convened not later than 1966.

(ii) **Training centre in photogrammetry and aerial surveys**

**Origin**

Description: Preparation for the setting up of regional or sub-regional centres for the interpretation of aerial surveys and training in photogrammetry and airborne geophysical surveys. Views and proposals are being collected from national cartographic services of the African countries. Convening a meeting of a small group of experts to study the proposals and to make recommendations for the consideration of the Commission at its next session.

(iii) Joint centres for specialized services in surveying and mapping


Description: Consultations being carried out with governments of African countries on the question of establishing joint centres for specialized services on a regional or sub-regional basis.

Study of replies received from governments and preparation of a report on the subject, for submission to the Commission at its next session.

The setting-up of a restricted committee made up of experts from sub-regions, with the following terms of reference: to define the nature and scope of the task of the common centres; to assess the means at present available in Africa with regard to the specialized services and to make preliminary studies on the location, cost of installation and operation and on the planning and the financing of the proposed centres. Report to be submitted to African governments not later than July 1965.