



ECONOMIC COMMISSION FOR EUROPE
ANNUAL REPORT

(23 April 1978 – 27 April 1979)

ECONOMIC AND SOCIAL COUNCIL
OFFICIAL RECORDS, 1979

SUPPLEMENT No. 12

VOLUME II

UNITED NATIONS

New York, 1979



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NOTE

**Symbols of United Nations documents are composed of capital letters combined with figures.
Mention of such a symbol indicates a reference to a United Nations document.**

E/1979/47/Add.1
E/ECE/983/Add.1

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CHAPTER V

PROGRAMME OF WORK FOR 1979-1983

Introduction

The Commission's programme of work for 1979-1983, as considered and approved at the thirty-third session of the Commission, is reproduced as Chapter V of the Commission's Report to the Economic and Social Council.

The programme of work is divided into the following programme categories:

- 01 - The Commission
 - 01 - Policy and co-ordination
 - 01 (a) - Engineering industries
 - 01 (b) - General energy problems
 - 01 (c) - Standardization
 - 01 (d) - Automation
- 02 - Agriculture
- 03 - Chemicals
- 04 - Coal
- 05 - Environment
- 06 - Electric power
- 07 - Gas
- 08 - Housing, building and planning
- 09 - Inland transport
- 10 - Science and technology
- 11 - Economic plans, programmes and perspectives
- 12 - Statistics
- 13 - Steel
- 14 - Timber
- 15 - Trade
- 16 - Water problems

01. - POLICY AND CO-ORDINATION OF THE WORK
OF THE COMMISSION AS A WHOLE

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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WORK AREA 01.1: ACTIVITIES OF THE COMMISSION AS A WHOLE
AND PROGRAMMES OF WORK AND PRIORITIES

01.1.1. Review and guidance of the activities of the
Commission as a whole: evaluation, co-ordination
and formulation of programmes of work

Description: At its annual sessions the Commission will consider its work as a whole; review and evaluate its own activity as well as that of its subsidiary bodies; guide the policy orientation, co-ordination and planning of the work carried out by the subsidiary bodies under its auspices; and formulate and approve its programme of work.

Method of work: The Commission will perform this function with the assistance of its Sessional Committee as appropriate, by considering at its annual sessions the reports of its subsidiary bodies on their work and the Executive Secretary's reports on the implementation of its relevant resolutions and decisions. The Commission will consider and approve annually its programme of work which will cover the next five years and will incorporate the programmes of work of its Principal Subsidiary Bodies. The approved programme of work will be submitted by the Commission in its Annual Report to the Economic and Social Council for its endorsement. The agreed policy guidance - which will include measures for co-ordination, integration and concentration of all activities carried out under the Commission's auspices - will be embodied in its resolutions and decisions for implementation, as appropriate, by the Governments, by the Commission's subsidiary bodies and its secretariat.

cont.

01.1.2. The work and future activities of the Commission

Description: At its thirty-second session the Commission adopted its resolution 1 (XXXII). In accordance with Section I of this resolution, the Commission will continue its efforts in connexion with the implementation of the pertinent provisions of the Final Act of the CSCE calling for multilateral implementation.

At its thirty-third session the Commission adopted its resolution 1 (XXXIII) on the work and future activities of the Commission and the proposal in regard to the holding of all-European congresses or inter-State conferences on co-operation in the field of protection of the environment, development of transport, and energy.

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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At its thirty-fourth session, the Commission adopted its resolution 1 (XXXIV) in which it:

1. Called upon the member Governments to continue to take full advantage of the potential of the Economic Commission for Europe as an instrument for strengthening economic relations and multilateral co-operation in the region;
2. Reiterated its earlier decisions to continue to intensify co-operation among member countries in the framework of the work programme of the ECE, and reaffirmed the determination of member Governments to work towards an effective multilateral implementation of the pertinent provisions of the Final Act of the CSCE within the framework of the ECE, bearing in mind the importance of the principles and aims of the United Nations Charter at the regional level; and requested its subsidiary bodies to continue to take into account, for their work, the pertinent provisions of the Final Act which call for multilateral implementation within the framework of the ECE;
3. Noted with satisfaction that the Executive Secretary stated his views at the Meeting of Experts foreseen by the Final Act in order to prepare a "Scientific Forum" which took place in Bonn in June 1978, and that he made contributions relating to the work of the Meeting of Experts on the Mediterranean which recently took place in Valletta within the framework of the Mediterranean chapter of the Final Act, and asked him to participate, if invited to do so, in activities resulting from these meetings, and to make the necessary arrangements to that effect;
4. Reiterated its previous call to its subsidiary bodies to take duly into account when reviewing and carrying out their programmes of work the interests of member countries which are developing from an economic point of view; to this effect the Executive Secretary will take the necessary measures;
5. Requested its subsidiary bodies to take into account in their activities the possible contributions of the ECE to the United Nations programmes designed to assist developing countries, and the necessity of effective co-operation with other international organizations;

Estimated duration (in years)	Estimated termination year
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6. Requested the Executive Secretary to continue contacts with the Executive Secretaries of the other regional commissions of the United Nations concerning the co-operation between the ECE and other regional commissions on problems of common interest, having in mind also the resolutions of the General Assembly and of the Economic and Social Council of the United Nations, and to inform the Commission accordingly;

7. Noted with satisfaction the work of the Senior Advisers to ECE Governments on Environmental Problems in accordance with part II of resolution 1 (XXXIII) concerning a high level meeting within the framework of the ECE on the protection of the environment as contained in document ECE/ENV/29;

8. Agreed that following completion and acceptance by the Commission of the draft convention and draft resolution on long-range transboundary air pollution and the draft declaration on low- and non-waste technology and re-utilization and recycling of wastes as contained in Commission document E/ECE(XXXIV)/L.18 and in Annex B to document ECE/ENV/29 respectively, the above-mentioned criteria for the convening of a high level meeting on the protection of the environment within the framework of the ECE have been met;

9. Decided therefore to convene the high level meeting on the protection of the environment from 13 to 16 November 1979 and, in this regard, draws to the attention of member Governments decision A (XXXIV);

10. Reiterated the importance of an extensive exchange of information and views between member Governments on general energy problems, including energy resources, and national objectives and policies in these areas, thus providing a basis for closer international co-operation on energy matters and, inter alia, for discussion of problems related to a possible high-level meeting on energy organized within the framework of the ECE;

11. Decided to establish on an ad hoc basis a new Principal Subsidiary Body entitled Senior Advisers to ECE Governments on Energy and draws to the attention of member Governments decision B (XXXIV);

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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12. Reiterated the suggestion in resolution 1 (XXXIII) that member Governments should study thoroughly the USSR Government's proposal for the holding of all-European congresses in the fields of transport and energy in the light of further discussions in the Commission and the relevant provisions of the Final Act of the CSCE;

13. Asked the Executive Secretary to circulate such views in regard to the proposal as member Governments may wish to communicate to him;

14. Approved its programme of work for 1979-80 and endorsed in principle, subject to review at its thirty-fifth session, its long-term programme of work for 1979-1983;

15. Endorsed the Executive Secretary's conclusions relating to increasing efficiency in methods of work as contained in document E/ECE/964 and reiterated that continued efforts should be made for better concentration, integration and co-ordination of the ECE activities and, in this respect, draws to the attention of member Governments and the subsidiary bodies its decision D (XXXIV);

16. Requested its subsidiary bodies, as well as the Executive Secretary, to take into account in their work and when reviewing their respective programmes this resolution, the decisions of the Commission, and the points raised by delegations and reported in the relevant passages of the summary records and the reports of this session inasmuch as they are addressed therein; and

17. Requested the Executive Secretary to transmit the present resolution as well as the other decisions of this session, together with the views expressed or agreed in relation thereto by member Governments, to the Principal Subsidiary Bodies concerned for their guidance.

01.1.3. High-level meeting within the framework of the ECE on the protection of the environment

Description: At its thirty-fourth session, the Commission adopted its decision A (XXXIV), in which it:

1. Decided to convene the high-level meeting on the protection of the environment from 13 to 16 November 1979;

2. Agreed that the following draft documents be submitted to the high-level meeting for formal adoption:

- A. Convention and Resolution on Long-range Transboundary Air Pollution,
- B. Declaration of Intent and Recommendations for National Action and International Co-operative Activities including Follow-up Activities within the Framework of the ECE in the field of low- and non-waste technology and re-utilization and recycling of wastes;

and, for this purpose, asks the Executive Secretary to convene an ad hoc group of experts to finalize the legal and linguistic editing of Commission document E/ECE(XXXIV)/L.18 and Annex B to document ECE/ENV/29, as necessary, from 11 to 15 June 1979;

3. Invited the Executive Secretary to make the necessary preparations for the high-level meeting and to draw up the following agenda:

1. Adoption of the agenda
2. Election of Officers
3. General debate on the environmental situation in the ECE region, in particular long-range transboundary air pollution and low- and non-waste technology and re-utilization and recycling of wastes, and also other environmental problems dealt with in the ECE, inter alia, water pollution including transboundary water pollution
4. Formal adoption of the Convention and Resolution on Long-range Transboundary Air Pollution, the Declaration of Intent and Recommendations for National Action and International Co-operative Activities including Follow-up Activities within the Framework of the ECE in the field of low- and non-waste technology and re-utilization and recycling of wastes
5. Other business
6. Adoption of the report

4. Invited the Executive Secretary to report on the implementation of this decision to the thirty-fifth session of the Commission.

Estimated duration (in years)	Estimated termination year
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01.1.4. Energy

Description: At its thirty-fourth session the Commission adopted its decision B (XXXIV) in which it:

1. Endorsed the ongoing activities in the framework of the Commission's programme of work on General Energy Problems in the ECE region pursuant to Commission decision H (XXXII);

2. Decided to establish on an ad hoc basis a new Principal Subsidiary Body entitled "Senior Advisers to ECE Governments on Energy" with the following mandate:

(a) To undertake an extensive exchange of information, views and experiences between member States on general energy problems, including an extensive exchange of information, views and experiences regarding energy resources, and national objectives and policies in these areas;

(b) To elaborate on the basis of the foregoing a programme of work, subject to annual review and approval by the Commission, taking into account the need for regular co-operation and co-ordination with the Committees, on Coal, Electric Power, and Gas, and co-operation with other Principal Subsidiary Bodies concerned; in this regard particular attention should be given to the decision E (XXXIV), and to the suggestions made by the Executive Secretary as contained in document E/ECE/982/Add.1 ;

(c) To examine problems related to a possible High-Level Meeting on energy organized within the framework of the ECE;

3. Declared its willingness to consider, as of its next session, an assignment to the Senior Advisers to ECE Governments on Energy for the exploration of topics for a possible high-level meeting on energy within the framework of ECE on the assumption that satisfactory progress has been made in all areas of the mandate of the new body;

4. Further declared its willingness to consider as of its next session the advisability in the light of the progress achieved in the field of energy, of making the newly created ad hoc body a permanent one;

5. Decided to consider at a future session proposals by member States or by the Executive Secretary in consultation with member States, designed to increase the effectiveness of the energy activities and programmes of all ECE bodies dealing with energy; and

6. Requested the Executive Secretary to report to the thirty-fifth session on the implementation of this decision.

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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01.1.5. Economic co-operation in the Mediterranean
in the light of the Final Act of the CSCE

Description: In accordance with Commission decisions B (XXXII) and G (XXXIII), the Commission and its Principal Subsidiary Bodies will continue to pay particular attention to projects and activities of interest to the Mediterranean countries of the ECE region.

At its thirty-fourth session, the Commission adopted its decision Q (XXXIV) in which it:

1. Noted with satisfaction the reports of the Executive Secretary, documents E/ECE/976 and E/ECE/977 and Addenda 1 and 2, pursuant to Commission decision G (XXXIII) on economic co-operation in the Mediterranean in the light of the Final Act of the CSCE, and the contributions made by the Commission relating to the preparation and to the work of the Valletta Meeting;
2. Requested the Executive Secretary to continue to transmit ECE documentation of interest and relevance directly to all Mediterranean countries not members of the Commission, and agreed that their attention is drawn to relevant ECE meetings to which they will be invited in accordance with paragraph 11 of the Commission's terms of reference;
3. Further requested the Executive Secretary to continue to co-operate with the secretariats of the Economic Commission for Africa and the Economic Commission for Western Asia on projects within the competence of the ECE which may be of common interest to all the Mediterranean countries;
4. Noted with interest the report of the Valletta Meeting in its references to the ECE, and requested its subsidiary bodies to continue to pay particular attention in their work to projects and activities of interest to the Mediterranean countries of the ECE region, bearing in mind the relevant sections of the report of the Valletta Meeting;
5. Decided to intensify co-operation with other competent international organizations on subjects of common interest to the Mediterranean countries; and
6. Requested the Executive Secretary to prepare for the thirty-fifth session a report on the implementation of this decision.

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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01.1.6. Concentration and integration of the
Commission's programme of work

Description: At its annual sessions, the Commission will examine its programmes of work with a view to their concentration and integration, and will decide on which aspect of the programmes of work will be considered in greater detail at the following session.

At its thirty-fourth session, the Commission adopted its decision D (XXXIV), in which it:

1. Took note with satisfaction of the Executive Secretary's reports on concentration and integration of the Commission's programmes of work (E/ECE/968 and 969);
2. Requested the Executive Secretary, at the regular sessions of each Principal Subsidiary Body, to indicate to what extent any of its projects could be undertaken jointly with other organs of the Commission, with a view to:
 - ensuring complementarity in the Commission's activities;
 - increasing the effectiveness of the studies undertaken by achieving interconnexion between them particularly through the utilization of the results of one study as an input for others;
 - making maximum use of available expertise in member countries; and
 - combining some of their ad hoc meetings;
3. Requested the Executive Secretary to transmit the present decision, together with document E/ECE/969 and the views expressed in relation thereto by member Governments at the thirty-fourth session, to the Principal Subsidiary Bodies for their consideration;
4. Decided to select activities in the field of environment as the next major topic to be considered in depth from the point of view of concentration, integration and co-ordination; and
5. Requested the Executive Secretary to report on the implementation of this decision to the thirty-fifth session, taking into account the comments made by the Senior Advisers to ECE Governments on Environmental Problems

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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2. Requested the Executive Secretary to seek to make the necessary arrangements to enable the Group of Rapporteurs which has been entrusted with the revision of the Declaration to fulfil the mandate given to it by the Committee on Water Problems that "the revised Declaration may be ready in due time for examination by the Group of Experts on Aspects of Water Quality and Quantity at its seventh session, and subsequently by the Committee on Water Problems".

01.1.13. Multilateral system for the notification of laws and regulations concerning foreign trade and changes therein (MUNOSYST)

Description: At its thirty-fourth session, the Commission adopted its decision 1 (XXXIV), in which it:

1. Invited ECE Governments that had not already done so to answer as soon and as completely as possible the questionnaires referring to MUNOSYST in order to enable the secretariat to collect further information for the feasibility study;
2. Urged wider and more representative participation for a possible further trial run; and
3. Decided to review the situation at its thirty-fifth session and if appropriate to consider further steps permitting the completion of the feasibility study.

WORK AREA 01.2: ECONOMIC DEVELOPMENTS, PROBLEMS AND PROSPECTS IN THE ECE REGION

01.2.1. Review of economic developments, problems and prospects in the ECE region

Description: At its annual sessions the Commission will review economic developments, problems and prospects in the ECE region.

Method of work: The Commission will review annually the economic situation in its region using as background documentation the annual economic surveys, economic bulletins and other special studies and statistical bulletins prepared and published by the secretariat.

cont.

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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01.1.7. Problems of land use and land-use
planning in the ECE region

Description: In accordance with decision H (XXXIII), the Commission's Principal Subsidiary Bodies will give appropriate attention to land use and land-use planning aspects in drawing up their programmes of work and will draw the Commission's attention to land-use problems for which a co-ordinated approach between Principal Subsidiary Bodies might be useful or necessary.

cont.

01.1.8. Dissemination of information

Description: In accordance with its decision F (XXXII) the Commission will continue to encourage its subsidiary bodies to release into the public domain studies and reports prepared under their auspices.

cont.

01.1.9. Increased effectiveness in use of ECE resources

Description: At its thirty-fourth session, the Commission adopted its decision E (XXXIV), in which it:

1. Commended the Executive Secretary for his initiative within the secretariat to improve further the management of ECE resources;
2. Requested and encouraged the Executive Secretary to continue his efforts for rational use of resources;
3. Requested its subsidiary bodies to implement the proposals outlined in E/ECE/964, paragraph 153;
4. Requested the subsidiary bodies to streamline their programmes in the process of concentration and integration by focusing their activities on major substantive problems and avoiding work of lesser importance, and to report to the thirty-fifth session of the Commission on measures taken and proposed to give effect to this provision;
5. Agreed that such measures should lead to an appreciable reduction in the number, and better co-ordination of, ECE meetings;
6. Invited the Executive Secretary to bring to the attention of the Joint Inspection Unit the contents of this decision with a view to their carrying out a thorough inspection of the translation, reproduction and distribution facilities of the United Nations Office at Geneva; and
7. Requested the Executive Secretary to deliver a consolidated report to the thirty-fifth session of the Economic Commission for Europe on all actions and results deriving from this resolution.

Estimated duration (in years)	Estimated termination year
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01.1.10. International co-operation in the pharmaceutical industry

Description: At its thirty-fourth session, the Commission adopted its decision F (XXXIV), in which it:

1. Recommended to the Chemical Industry Committee to explore in close collaboration with the Government Officials Responsible for Standardization Policies the problems of the pharmaceutical industry related to safety requirements, methods of examination and the ways how these problems could be dealt with in the framework of the ECE; and
2. Decided to consider this question at its thirty-fifth session on the basis of a report prepared by the Executive Secretary.

01.1.11. Human settlements

Description: At its thirty-fourth session, the Commission adopted its decision H (XXXIV), in which it:

1. Endorsed the measures already taken by the Committee on Housing, Building and Planning at its thirty-seventh, thirty-eighth and thirty-ninth sessions with a view to streamlining its structure, programme and methods of work to be better adapted to serve the interests and concerns of ECE member countries and to contribute effectively to global United Nations efforts in the field of human settlements (ECE/HBP/16, ECE/HBP/22 and ECE/HBP/25);
2. Decided to revise the terms of reference of the Committee on Housing, Building and Planning (for the revised terms of reference, see Chapter IV, decision H (XXXIV)).

01.1.12. Co-operation between the Senior Advisers to ECE Governments on Environmental Problems and the Committee on Water Problems

Description: At its thirty-fourth session, the Commission adopted its decision I (XXXIV), in which it:

1. Invited the Senior Advisers to ECE Governments on Environmental Problems and the Committee on Water Problems to consider closer-co-operation in activities related to the protection of the aquatic environment and water pollution control and in particular, as far as possible, in the drafting of the ECE Declaration of policy on prevention and control of water pollution, including transboundary pollution;

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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01.2.2. The over-all economic perspective for the
ECE region up to 1990

Description: In accordance with Commission decision G (XXXII), the Senior Economic Advisers to ECE Governments will bear in mind, when preparing Over-All Economic Perspectives for the ECE Region, the specific problems of member countries of the Commission which are developing from an economic point of view, and will take into account the contributions of the other Principal Subsidiary Bodies in the area of their competence. (See also programme category 11).

cont.

01.2.3. Long-term economic trends and development of
international co-operation

Description: At its thirty-fourth session, the Commission adopted its decision K (XXXIV), in which it:

1. Took note with appreciation of the work accomplished and the experience gained so far by the Senior Economic Advisers and other Principal Subsidiary Bodies in the field of long-term programming and the projections and, in particular, in the elaboration of the Overall Economic Perspective;
2. Considered it necessary to streamline these activities to bring about sufficient comparability of the results thereof; to this end development trends should be covered by analyses using common time horizons and methods of research;
3. Requested the Senior Economic Advisers and other Principal Subsidiary Bodies involved, especially the Committee on the Development of Trade, to continue their joint efforts to amend and improve the Overall Economic Perspective up to 1990;
4. Looked forward to the deliberations of the ECE Seminar on Forms and Orientations of International Co-operation in the Long-term Development Pattern to be held in Warsaw in May 1979; and
5. Requested the Executive Secretary to report to the Commission at its thirty-fifth session on the implementation of this decision.

01.2.4. The economic consequences of migrant labour
in the ECE region

Description: At its thirty-fourth session, the Commission adopted its decision M (XXXIV), in which it:

1. Invited the secretariat to complete the studies on the consequences of intra-European temporary migration of labour for trade, investment and industrial co-operation, and on labour supply and migration in Europe: demographic dimensions 1950-1975, and prospects; and

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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2. Reiterated its recommendation that host countries and countries of origin should intensify their bilateral contacts in order to find joint solutions to the most urgent problems in the sphere of migrant labour.

01.2.5. Co-operation in the field of new technologies of coal extraction and utilization

Description: At its thirty-fourth session, the Commission adopted its decision O (XXXIV), in which it:

1. Emphasized the role of the Coal Committee in promoting new technologies of coal extraction and utilization designed to respond to the highly needed improvement in energy effectiveness and in levels of pollution caused by coal combustion, and further research on its gasification and liquefaction;

2. Requested the Committee to intensify the international co-operation conducted in its framework in the field of new technologies of coal extraction and utilization;

3. Requested the Coal Committee to consider close co-operation with the Senior Advisers to ECE Governments on Environmental Problems and its Working Party on Air Pollution;

4. Requested the Coal Committee, in close consultation with the Chemical Industry Committee and the Committee on Gas to continue to consider the concept of the creation of the ECE Co-ordinating Centre on Coal Gasification and Liquefaction and its possible status;

5. Looked forward to the second Symposium on Coal Gasification and Liquefaction to be held in Katowice (Poland) in April 1979; and

6. Requested the Executive Secretary to present to the thirty-fifth session a report on the implementation of this decision.

01.2.6. Study of trade in chemical products among ECE member countries

Description: At its thirty-fourth session, the Commission adopted its decision G (XXXIV), in which it:

1. Recommended that the Chemical Industry Committee consider engaging in a study of trade in chemical products among ECE member countries;

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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2. Recommended to the Group of Experts on the Periodic Survey of the Chemical Industry, scheduled to meet on 1-2 October 1979, to consider the scope, outline, and methods of work of such a study taking into account the discussion which took place at the thirty-fourth session of the Commission;
3. Invited Governments to transmit to the secretariat by 1 August 1979 any further comments and proposals they may have on this subject;
4. Requested the Executive Secretary to prepare, on the basis of the comments and proposals received, a note to facilitate the discussions at the meeting of the Group of Experts on the Periodic Survey of the Chemical Industry; and
5. Invited the Group of Experts on the Periodic Survey of the Chemical Industry to report to the twelfth session of the Chemical Industry Committee on the outcome of the deliberations.

WORK AREA 01.3: CO-OPERATION WITH OTHER UNITED NATIONS PROGRAMMES AND BODIES

01.3.1. Review of Commission activities in support of other United Nations programmes and in co-operation with other United Nations bodies

Description: At its annual sessions the Commission will review its activities in support of and its contribution to other United Nations programmes, especially those of UNDP, UNCTAD, UNIDO and UNEP as well as of the other regional commissions. It will also consider matters relating to its co-operation with other United Nations bodies including the specialized agencies such as ILO, FAO, UNESCO and WHO as well as IAEA. Special attention will be paid to problems of the member countries of the ECE which are developing from the economic point of view as part of the Commission's contribution to the global programmes and objectives of the United Nations aiming at economic development.

Method of work: The Commission will carry out this review annually on the basis of the Executive Secretary's reports on the participation of such organizations and programmes in the Commission's work; on the Commission's own contribution to these programmes; and on the secretariat's co-operation with the secretariats of these organizations, including the secretariats of the other regional commissions.

cont.

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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01.3.2. The contribution of the Commission to the preparations for the United Nations Conference on Science and Technology for Development

Description: In accordance with its decisions A (XXXII) and F (XXXIII) the Commission will continue to co-operate fully and actively with the competent organs of the United Nations system in the preparations for the Conference while at the same time ensuring co-ordination at the regional level.

At its thirty-fourth session, the Commission adopted its decision J (XXXIV), in which it:

1. Requested the Executive Secretary to inform the Conference, if invited to do so, of the work of the Commission in the field of science and technology, as well as of the ECE contribution to the Conference, and to transmit to the Conference the Commission's wishes for a successful outcome and the Commission's interest in, and willingness to co-operate fully and actively in such follow-up action as may arise from the Conference that falls within the competence of the ECE;
2. Recommended to the ECE member States to develop the co-operation among themselves in the field of science and technology taking into account the recommendations contained in the Declaration of the European Regional Meeting held in Bucharest in preparation for the United Nations Conference on Science and Technology for Development (ECE/ERM.CSTD/2/Annex 2);
3. Requested the Senior Advisers to ECE Governments on Science and Technology at their next session when reviewing their programme of work to take into account the recommendations contained in the Declaration of the European Regional Meeting (ECE/ERM/CSTD/2) and, as appropriate, the results of the Conference; and, in this respect, to take into account the possible interest of different projects to countries outside the ECE region;
4. Requested that the Senior Advisers to ECE Governments on Science and Technology, when examining their programme of work, take into account the report of the Executive Secretary on the activities of the Commission in the field of science and technology from the point of view of concentration integration and co-ordination (E/ECE/969), as well as views expressed on this report by delegations at the thirty-fourth session of the Commission; and
5. Invited the Executive Secretary to report to the thirty-fifth session of the Commission on the implementation of this decision and on any further action which may be required of it in the light of the outcome of the Conference.

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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01.3.3. The Commission's contribution to the preparatory work for the World Conference of the United Nations Decade for Women, 1980

Description: At its thirty-third session the Commission adopted its decision B (XXXIII), in which it requested the Executive Secretary to convene a seminar on "The participation of women in the economic evolution of the ECE region", to be held in 1979.

At its thirty-fourth session, the Commission adopted its decision N (XXXIV), in which it decided:

- (a) To take note of the Executive Secretary's report E/ECE/972;
- (b) To hold the Seminar on the Participation of Women in the Economic Evolution of the ECE Region in Paris (France) from 9-12 July 1979;
- (c) To submit the findings and conclusions of this Seminar as a contribution to the World Conference of the United Nations Decade for Women, 1980, in accordance with Economic and Social Council resolution 2062 (LXII); and
- (d) To request the Executive Secretary to report to the thirty-fifth session on the implementation of this decision.

01.3.4. Contribution of the ECE to the preparations for an International Development Strategy for the third United Nations Development Decade

Description: At its thirty-fourth session, the Commission adopted its decision C (XXXIV), in which it requested the Executive Secretary to:

- (a) Co-operate fully with the Director-General for Development and International Economic Co-operation in fulfilling his tasks in connexion with the formulation of a new international development strategy;
- (b) Submit the relevant information on the results achieved in analysing past trends and making projections, in particular relating to specific fields of international co-operation; and
- (c) Contribute effectively to the preparatory work of the new international development strategy by providing inputs including relevant documentation such as, inter alia, that enumerated in paragraph 37 of the document E/ECE/965 submitted to the thirty-fourth session of the Commission.

Estimated duration (in years)	Estimated termination year
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01.3.5. ECE follow-up to the United Nations Water Conference

Description: At its thirty-fourth session, the Commission adopted its decision P (XXXIV), in which it decided:

- (a) To take note of the Executive Secretary's report E/ECE/974 on the ECE follow-up to the United Nations Water Conference;
- (b) To express its satisfaction with the steps taken by the Committee on Water Problems to adapt its programme of work in the light of the Mar del Plata Action Plan, adopted at the United Nations Water Conference;
- (c) To reaffirm its intention to assume the central role within the region entrusted to it by the Economic and Social Council and in this respect to take any further steps necessary to secure the implementation of the Mar del Plata Action Plan within the region;
- (d) To invite the Committee on Water Problems to make concrete proposals for consideration by the Commission at its thirty-fifth session aimed at promoting and strengthening intergovernmental co-operation on water problems within the region, bearing in mind inter alia the resolution and/or decisions which might be adopted by the Economic and Social Council as a follow-up to the third special session of the Committee on Natural Resources;
- (e) To urge the Committee on Water Problems to pay special attention to those projects which are of particular relevance for, and/or could be jointly implemented with, other regional commissions; and
- (f) To request the Executive Secretary to report to the Commission at its thirty-fifth session on the implementation of this decision.

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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WORK AREA 01.4: CO-OPERATION WITH OTHER INTERNATIONAL ORGANIZATIONS

01.4.1. Review of Commission activities involving co-operation with other international organizations

Description: At its annual sessions the Commission will review its activities related to co-operation with other intergovernmental organizations such as the Council for Mutual Economic Assistance and the European Economic Community, and with international non-governmental organizations participating in the work of the Commission and its subsidiary bodies.

Method of work: The Commission will undertake this review annually on the basis of the Executive Secretary's report on the relevant activities arising out of the participation of such organizations and their secretariats in, and the contribution they make to, the work of the Commission and its subsidiary bodies.

cont.

01(a) - ENGINEERING INDUSTRIES

Note: At its thirty-fourth session, the Commission adopted its decision T (XXXIV) (for the text see Chapter IV above) in which it approved the following programme of work in the field of engineering industries.

I. PROJECTS SCHEDULED FOR 1979/1980

	<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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WORK AREA 01(a).1: MEDIUM- AND LONG-TERM PERSPECTIVES

01(a).1.1 Long-term prospects for production, consumption and international trade in engineering products

Description: The ad hoc Meetings of Experts on Engineering Industries will consider, both from the macro- and micro-economic standpoints, major trends in production, consumption and international trade in this field in order to provide policy makers with an analysis of the medium- and long-term prospects for the engineering industries.

Methods of work: The project will be implemented through a series of studies on selected problems of the engineering industries prepared by the secretariat with the help of Government Rapporteurs at intervals to be determined. On the basis of the study "Special Aspects of Market Trends and Prospects in Selected Branches of Engineering Industries" elaborated by the ad hoc Meeting of Government Experts on Market Trends and Prospects in Engineering Industries, other aspects of the problem and/or sector will be selected for consideration at a later stage.

cont.

01(a).1.2 Co-operation with the Senior Economic Advisers to ECE Governments on the preparation of the Over-all Economic Perspective for the development of engineering industries for the ECE Region up to 1990

Description: The ad hoc Meeting of Experts on Engineering Industries will consider and comment upon the Over-all Economic Perspective prepared by the Senior Economic Advisers to ECE Governments and will make available to the Senior Economic Advisers the results of the relevant projects for use in their work.

Methods of work: The secretariat will prepare, as appropriate, the necessary documentation for the ad hoc Meetings of Experts' examination, will assist them in carrying out their work on this project and will channel the necessary information, on request between the ECE bodies concerned.

cont.

WORK AREA 01(a).2: CURRENT DEVELOPMENTS AND PROSPECTS

01(a).2.1 Short-term problems in the engineering industries

Description: The ad hoc Meetings of Experts on Engineering Industries will examine periodically short-term trends and problems in selected sectors of topical interest to member Governments with a view to determining problems of common

Estimated duration (in years)	Estimated termination year
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interest and possibilities for their solution; a short annual review will be prepared on the basis of country statements collected by means of a questionnaire; every five years, on the basis of data and information so collected, a more complete review will be made.

Methods of work: Examination of selected subjects and market reviews will be made by the secretariat with the help of Government Rapporteurs. The secretariat should present the first results to the next ad hoc Meeting of Experts on Engineering Industries, especially the analytical part of the updating to 1975 of the study "Role and Place of Engineering Industries in National and World Economies".

WORK AREA 01(a).3: SELECTED ECONOMIC AND TECHNOLOGICAL PROBLEMS.

01(a).3.1 Precision instruments

Description: Bearing in mind the wide use of precision instruments whose growth is closely connected with the development of other branches of engineering industries, the ad hoc Meetings of Experts on Engineering Industries will provide a forum for the exchange of views on their techno-economic developments and future trends.

Methods of work: The secretariat will make a further collection of material and this will form the basis of a third circulation of material from ECE member countries and the results of this will be presented to the Seminar on "Present and Future Use of Precision Instruments in Engineering Industries"; the preparatory meeting for this seminar will be convened in due time.

01(a).3.2 Development and Use of Industrial Handling Equipment

Description: The ad hoc Meetings of Experts on Engineering Industries will consider economic and technical aspects of this topic in order to provide a forum for an exchange of experience on the rapid development of this branch of the engineering industries and industrial applications of this equipment, with a view to determining problems of common interest and possibilities for their solution on the most efficient use of equipment and ways of improving the physical working conditions of the labour force.

Methods of work: The Seminar on Development and Use of Industrial Handling Equipment will be held in Sofia (Bulgaria) from 3 to 8 September 1979.

Estimated duration (in years)	Estimated termination year
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01(a).3.3 Techno-economic aspects of innovation in
fabrication processes and products of the
engineering industries

Description: Bearing in mind the importance of innovation for all branches of the engineering industries, the ad hoc Meeting will provide a forum for an exchange of experience on its technical and economic aspects, to determine present possibilities and future trends.

Methods of work: A Seminar on this topic will take place in Italy in May/June 1980 at the invitation of the Italian Government and a preparatory meeting for this Seminar will be convened for February 1979.

01(a).3.4 Development of airborne equipment to intensify
world food production

Description: In the light of the conclusions and recommendation of the Seminar on Techno-economic Trends in Airborne Equipment for Agriculture and other Selected Areas of the National Economy, the ad hoc Meeting should continue to provide a forum for the exchange of experience on technical and economic aspects and determine present state and future trends.

Methods of work: A study should be undertaken on the basis of material submitted to the above mentioned Seminar to be implemented by means of a task force. The ad hoc Meeting recommended that it be led by the Polish authorities, helped by experts from interested countries with the secretariat in a supporting role. The first results to be presented to the next ad hoc Meeting of Experts on Engineering Industries.

WORK AREA 01(a).4: ENVIRONMENTAL AND RESOURCE SAVING
PROBLEMS 1/

01(a).4.1 Measures for saving materials in engineering
industries

Description: The ad hoc Meetings of Experts on Engineering Industries will study the most economical ways of using raw materials both primary and secondary of which the engineering industries are major consumers, with a view to determining problems of common interest and the possibilities for their solution and to inform the ECE Principal Subsidiary Bodies concerned.

1/ When implementing the projects included in this work area, due care will be taken to avoid any unnecessary duplication of work and to arrange, as appropriate, co-operation with the Senior Advisers to ECE Governments on Environmental Problems.

Estimated duration (in years)	Estimated termination <u>year</u>
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Methods of work: A study will be prepared by the secretariat with the help of rapporteurs. The second ad hoc Meeting of Experts will be held in November 1979 to consider the progress made.

WORK AREA 01(a).5: STATISTICS AND INFORMATION

01(a).5.1 Preparation of statistics

Description: The ad hoc Meetings of Experts on Engineering Industries, in co-operation with the Conference of European Statisticians, will continue to elaborate, collect and regularly publish statistical information on the engineering industries.

Methods of work: The secretariat will collect the required information from governments and publish it in regular bulletins and convene, as/or when required, ad hoc Meetings of Experts on Engineering Industries in co-operation with the Conference of European Statisticians.

01(a).5.1.1 Bulletin of Statistics on World Trade in Engineering Products

Description: The ad hoc Meetings of Experts on Engineering Industries, in co-operation with the Conference of European Statisticians, will continue to collect and regularly publish exports statistics on engineering industries, and seek further improvement of the contents of the Bulletin, in particular those which may result from the adoption of the SITC, Rev.2

Methods of work: The secretariat will collect the required information from Governments and publish it in an annual bulletin periodically reviewing its scope in particular in the light of the SITC, Rev.2. When required, joint meetings will be organized.

cont.

01(a).5.1.2 Enlargement of the scope of statistics in order to cover production, deliveries, etc. of engineering products

Description: The ad hoc Meetings of Experts on Engineering Industries, in co-operation with the Conference of European Statisticians, will investigate the possibilities of enlarging the scope of statistics in the field of engineering industries to be collected and published by the ECE.

Methods of work: The secretariat is entrusted to continue investigation of the availability of production and delivery statistics for engineering products in the ECE countries; the results should be presented to the next ad hoc Meeting of Experts on Engineering Industries.

Estimated duration (in years)	Estimated termination year
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01(a).5.1.3 Work on statistical problems (methodology, definitions, data collection, etc.)

Description: The ad hoc Meetings of Experts on Engineering Industries will further the work on the statistical problems on engineering statistics in the ECE region jointly with the Conference of European Statisticians.

Methods of work: Statistical problems will be approached by the ad hoc Meeting on Engineering Statistics in co-operation with the ad hoc Meeting on Statistics on Automation in order to prepare a joint meeting with the Conference of European Statisticians. The secretariat was entrusted to continue the elaboration of a list of statistical problems concerning engineering industries to be presented to a special ad hoc Meeting on Engineering Statistics to meet in February 1979 by, inter alia, preparing and sending a pilot questionnaire to member countries.

II. LIST OF PROJECTS OF SPECIAL INTEREST FOR POSSIBLE ACTION AT A DATE TO BE DECIDED

Selected Economic and Technological Problems

(a) Technical and economic aspects of the development of labour-intensive engineering industries

Description: The ad hoc Meetings of Experts on Engineering Industries will consider the problems facing the labour-intensive sectors of engineering industries, particularly those using pre-assembling methods of manufacturing and sub-contracting. The inter-relation of technical and economic aspects, such as the introduction of new technological processes with corresponding investments, will also be examined with the aim of assisting the member Governments in formulating policies and establishing an integrated approach to these problems.

Methods of work: Work will proceed through studies prepared by the secretariat with the help of Government Rapporteurs or, whenever appropriate, through convening seminars on specific aspects. A preparatory meeting should be convened in due course.

(b) Techno-economic aspects of anti-corrosion measures in engineering industries

Description: The ad hoc Meetings of Experts on Engineering Industries will consider the techno-economic aspects of corrosion prevention with a view to promoting an interdisciplinary approach to the problem and rationalizing the use of available information. Due attention will be paid to the need to avoid any unnecessary duplication of work with other international organizations.

Methods of work: In the light of recommendations made by the 1975 Seminar on Techno-economic Aspects and Results of Anti-corrosion Measures in the Engineering Industries, another seminar will be organized to cover new developments in this field, as defined by a preparatory meeting to be convened in due course. Co-operation with the secretariats of other international governmental and non-governmental organizations specializing in this topic will be established.

(c) Protection of engineering goods operating under difficult climatic conditions (especially electrical machinery and equipment)

Description: The ad hoc Meetings of Experts on Engineering Industries will promote the exchange of information on the technological and economic aspects of the protection of engineering goods operating under difficult climatic conditions. New technologies will be reviewed and their influence on the exports of such goods analysed.

Methods of work: Studies on selected problems will be prepared by the secretariat with the help of Government Rapporteurs or, whenever appropriate, through convening seminars on their specific aspects. A preparatory meeting should be convened in due course.

(d) Market trends and tendencies of international division of labour in the automobile industry (including production sharing co-operations of main parts for these products) especially East-West connexions in this field

Description: The ad hoc Meeting of Experts on Engineering Industries will study market trends concerning special aspects of the international division of labour in the automobile industry and promote the exchange of information.

Methods of work: A study will be prepared by the secretariat with the help of government rapporteurs and a seminar foreseen for 1981 or 1982. A preparatory meeting will be convened in due course.

(e) Techno-economic aspects of the production and use of forge and pressing equipment

Description: The ad hoc Meeting of Experts on Engineering Industries will consider the techno-economic aspects of forge and pressing equipment with a view to promoting an interdisciplinary approach to the problem of improving working conditions in forging shops.

Methods of work: A seminar should be organized at a date and place to be determined later and a preparatory meeting be convened in due course.

(f) Techno-economic aspects of development in the engineering industries producing semi-finished products (pattern of processes, including continuous processes used in the manufacture of semis, materials, energy and labour inputs and quality considerations)

Description: The ad hoc Meeting of Experts on Engineering Industries will promote the exchange of information on techno-economic developments in the production of intermediate engineering products. New technologies will be reviewed and their influence on the efficient use of materials, energy, analysed.

Methods of work: A seminar should be held at a date to be determined later and a preparatory meeting be convened in due course.

(g) Techno-economic aspects of the development of welding techniques and technology and their influence on the engineering industries

Description: The ad hoc Meeting of Experts on Engineering Industries will promote the exchange of information on the techno-economic development of welding and its influence on engineering industries. New technologies will be reviewed and their efficiency assessed.

Methods of work: A seminar should be held at a date and place to be determined later and a preparatory meeting will be convened in due course.

- (h) Problems of mechanization and automation of hard manual work in engineering industries (labour intensive, monotonous, harmful to health, etc.)

Description: The ad hoc Meeting of Experts on Engineering Industries will promote the exchange of information on problems of mechanization and automation of hard manual work in engineering industries. New technologies and methods of work will be reviewed and their effectiveness assessed.

Methods of work: A seminar and/or a study to be made, with the help of Government Rapporteurs, at a date and place to be determined later and the necessary meeting will be convened in due course.

- (i) Effective use of engineering equipment, in particular machine-tools

Description: The ad hoc Meeting of Experts on Engineering Industries, in co-operation with the Working Party on Automation, will study the effective use of engineering equipment and promote an exchange of information on the latest techniques and methods of introducing such equipment.

Methods of work: A seminar and/or a study will be made, with the help of Government Rapporteurs, at a date and place to be determined later and the necessary meeting will be convened in due course.

- (j) Techno-economic aspects of creating centralized repair shops in selected branches of engineering industries

Description: The ad hoc Meeting of Experts on Engineering Industries will promote the exchange of information and national experiences on the techno-economic aspects of creating centralized repair shops in selected branches of engineering industries.

Methods of work: A seminar should be held at a date and place to be determined later and a preparatory meeting will be convened in due course.

- (k) New achievements and the outlook regarding aeronautical equipment for spraying in agriculture and forestry, aquatic control, and protection of the environment and public health

Description: Study the scientific and technical problems associated with airborne engineering equipment used for the distribution of solid and liquid chemicals; the stocking and feeding of fish and killing of aquatic weeds; and disinfection, decontamination and other measures for protecting the environment and public health.

Methods of work: A seminar should be held at a date and place to be determined later and a preparatory meeting will be convened in due course.

(1) Influence of operational demands on the choice of techno-economic parameters for flying equipment used in agriculture, forestry and aquatic control

Description: Contribute to better understanding between users of airborne equipment in agriculture, forestry and aquatic control and the manufacturers of the equipment. Study problems of choice and optimization of techno-economic parameters for airborne equipment.

Methods of work: A seminar and/or a study will be made, with the help of Government rapporteurs, at a date and place to be determined later and the necessary meeting will be convened in due course.

(m) Economic, ecological and legal consequences of agro-aviation activities

Description: Attempt to develop criteria for evaluating the usefulness and economic effectiveness of airborne equipment in agriculture. And also to examine the legal aspects of agro-aviation activities, in order to arrive at a more critical and keen approach to agricultural aviation practice, both from the point of view of suppliers to and users of agro-aviation services.

Methods of work: A seminar will be held at a date and place to be determined later and the necessary meeting will be convened in due course.

* * *

01(b) - GENERAL ENERGY PROBLEMS

Note: At its thirty-fourth session, the Commission adopted its decision B (XXXIV), in operative paragraph 1 of which it endorsed the ongoing activities in the framework of the Commission's programme of work on General Energy Problems in the ECE region, pursuant to Commission decision H (XXXII). In operative paragraph 2(b) of the same decision, it gave the Senior Advisers to ECE Governments on Energy a mandate to elaborate a programme of work, for review and approval by the Commission. The programme of work reproduced below, therefore, consists only of the projects included in the programme of work as approved by the thirty-second session of the Commission which are of a continuing character, or which have not yet been completed.

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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WORK AREA 01(b).1: MEDIUM- AND LONG-TERM TRENDS AND PERSPECTIVES

01(b).1.1. Review of work done by Principal Subsidiary Bodies
on medium- and long-term energy trends and
perspectives

Description: At its annual sessions the Commission will review work undertaken by its Principal Subsidiary bodies on medium- and long-term energy trends and perspectives; and consider studies prepared by the secretariat on this subject. Following the agreement reached at the Commission's twenty-eighth session to expand inter-governmental co-operation on general energy problems in the ECE region (paragraph 189 of E/5276) and pursuant to operative paragraph (d) of Commission decision F(XXVII), the Executive Secretary will bring to the attention of the Commission and its principal Subsidiary Bodies concerned significant new developments in the energy sector which merit the Commission's attention.

Method of work: This review will be made on the basis of the relevant parts of the reports submitted to the Commission by the Principal Subsidiary Bodies on their annual sessions as well as of relevant secretariat studies. cont.

WORK AREA 01(b).2: CURRENT DEVELOPMENTS AND PROSPECTS

01(b).2.1. Review of work on current developments and
prospects for energy supplies, demand and
trade in the ECE region

Description: This review will be undertaken by the Commission at its annual sessions. Pursuant to Commission decision E (XXIX) the Principal Subsidiary Bodies will continue to pay attention to the relevant aspects of energy problems which are within their areas of responsibility and within the framework, and on the basis of their programmes of work and plans.

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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Method of work: The Commission will make this review on the basis of the relevant parts of the reports submitted to it by the Principal Subsidiary Bodies on their annual sessions as well as on the basis of relevant secretariat studies.

cont.

WORK AREA 01(b).3: PROBLEMS OF ENERGY ECONOMY AND EFFICIENCY

01(b).3.1. Exchanges of information and views on measures adopted or envisaged to achieve greater energy economy and efficiency and on the results of energy conservation policies

Description: In operative paragraph (c)(i) of its decision G (XXXI) the Commission agreed to undertake periodic exchanges of information and views on measures adopted and envisaged to achieve greater economy and efficiency, and on the results of these measures.

Method of work: These exchanges of information and use will take place on the occasion of ad hoc meetings convened by the Commission at periodic intervals.

cont.

01(b).3.2. Reviews of work done or planned in the ECE framework relating to energy economy and efficiency

Description: In operative paragraph (c)(i) of its decision G (XXXI) the Commission agreed to undertake periodic reviews of work done or planned in the EEC framework relating to energy economy and efficiency. In operative paragraph (c)(iii) of its decision G (XXXI) the Commission asked its Principal Subsidiary Bodies concerned to continue to give special attention to the possibility of including in their work programmes or of intensifying their work on, projects relating to increased energy economy and efficiency, and to initiate and carry out co-operative studies on such specific topics selected by them as:

(a) incorporation into national plans and programmes for economic growth of the objective of lowering energy consumption rates and increasing energy efficiency (Senior Economic Advisers to ECE Governments).

(b) possibilities, methods and related problems of increasing energy productivity in selected economic branches (Committees on Agricultural Problems, Chemical Industry, Coal, Electric Power, Gas, Inland Transport, Steel and Timber);

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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(c) long-term energy consumption perspectives and scenarios in the light of energy conservation programmes (Senior Economic Advisers to ECE Governments);

(d) the use of econometric models, input-output and cost-benefit analysis for assessing the potential of energy conservation and for optimizing conservation programmes;

(e) elaboration of internationally acceptable concepts, definitions and statistics on energy conservation (Conference of European Statisticians);

(f) application of the heat pump (Committee on Electric Power);

(g) regulations for construction of motor vehicles with a view to energy savings, including dieselization, size and fuel consumption limits, etc. (Inland Transport Committee);

(h) environmental aspects of energy conservation measures (Senior Advisers to ECE Governments on Environmental Problems).

Method of work: The reviews of work done and planned on these subjects will take place on the occasion of ad hoc meetings convened by the Commission at periodic intervals.

cont.

01(b).3.3. Economic, Technological and environmental problems

Description: Pursuant to operative paragraph (c)(ii) of its decision G (XXXI) the Commission will consider, on the basis of recommendations by ad hoc meetings and the Principal Subsidiary Bodies concerned, those economic, technological and environmental problems which are relevant to energy economy and efficiency. At its thirty-first session the Commission selected the following problems for consideration:

(a) combined production of electric power and heat;

(b) conservation aspects of the development and application of new techniques for the transformation of primary energy, such as coal gasification and liquefaction;

(c) techniques and results of "public awareness" and "public action" programmes;

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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- (d) recycling of energy-intensive industrial wastes and by-products as well as the use of municipal wastes for energy production;
- (e) improved techniques for extraction and processing of primary forms of energy;
- (f) improved insulation of houses and buildings.

Method of work: These problems will be dealt with at ad hoc meetings and seminars convened and prepared by the Executive Secretary, as appropriate, in co-operation with the Principal Subsidiary Bodies concerned.

cont.

Seminars on conservation aspects of the development and application of new techniques for the transformation of primary energy will be held. The conservation aspects of coal gasification and liquefaction will be dealt with at the Symposium on the Gasification and Liquefaction of Coal to be held in 1979.

2

1979

WORK AREA 01(b).4: SELECTED ECONOMIC, METHODOLOGICAL AND STATISTICAL PROBLEMS

01(b).4.1. Use of models for policy making in the energy sectors

Description: The Commission will continue its work on the follow-up of the decisions taken at the 1973 Symposium on Mathematical Models of Sectors of Energy Economy.

Method of work: Seminars on selected problems related to the use of models for policy making in the energy sectors will be convened by the Commission, as appropriate.

cont.

A Seminar on Modelling Studies and their Conclusions on Energy Conservation and its Impact on the Economy will be held in 1979

2

1979

01(b).4.2. Bulletin of General Energy Statistics for Europe

Description: The Bulletin of General Energy Statistics for Europe will continue to be issued covering extraction, conversion, transport and use of energy.

Method of work: Taking into account the results of the work of the Conference of European Statisticians on the elaboration of a system of general energy statistics serving as a framework for the development and harmonization of statistics on energy needed for national and international purposes, this Bulletin will be prepared by the secretariat and issued annually.

cont.

01(c) - STANDARDIZATION

Note: At its thirty-fourth session, the Commission adopted its decision R (XXXIV) (for the text see Chapter IV above) in which it approved the following programme of work in the field of standardization.

	<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
<u>WORK AREA 01(c).1: INTERNATIONAL HARMONIZATION OF STANDARDS AND TECHNICAL REGULATIONS</u>		
01.(c).1.1. <u>International and national developments and prospects</u>		
<u>Description:</u> Regular reviews at approximately three-year intervals and analysis of recent developments and prospects related to standardization and certification policies pursued by ECE Governments, by international standardizing bodies and by standards organizations.		
<u>Method of work:</u> Regular meetings of Government Officials Responsible for Standardization Policies, and intersessional work of the Group of Experts on Standardization Policies.		cont.
01.(c).1.2. <u>Harmonization of standards and technical regulations</u>		
<u>Description:</u> Identification of concepts and problems.		
<u>Method of work:</u> Consideration by Meetings of Government Officials and their Group of Experts on the basis of comments received from ECE Governments, international and regional standardizing bodies and proposals made by ISO and IEC.	2	1980
01.(c).1.3. <u>Identification of sectors which are of interest to ECE Governments with a view to a programme of work for international standardization</u>		
<u>Description:</u> Review of a list of sectors which are of interest to ECE member Governments with a view to a programme of work for international standardization and of the criteria on which the list is compiled.		
<u>Method of work:</u> Consultations on the basis of contributions by Governments and international standardizing bodies and standards organizations at meetings of Government Officials and their Group of Experts.		cont.

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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01.(c).1.4. Identification of problems in the fields of international standardization and certification

Description: Review of problems brought to the attention of Government Officials by ECE member Governments, other international organizations and/or ECE subsidiary bodies.

Method of work: A report will be prepared by the secretariat on the use of SI units in information provided to the ECE secretariat for consideration by the Group of Experts.

cont.

01.(c).1.5. Preparation and implementation of recommendations

Description: Formulation of new recommendations on standardization and certification policies (Work areas 1 and 2). Periodic reviews of the implementation of adopted recommendations.

Method of work: Regular preparation of draft recommendations by the secretariat on the basis of contributions by ECE Governments and discussions at meetings of Government Officials and their Group of Experts.

Cont.

01.(c).1.6. Impact of standardization and certification on international trade

Description: Consideration will be given to the possibilities of developing methods of evaluation of the economic impact of standardization and certification on international trade in selected sectors and of compiling a bibliography of studies of the economics of standardization.

Method of work: Co-operation with ECE Governments and subsidiary bodies and other international organizations, in particular the ISO, to identify sectors and establish the bibliography.

2

1980

01.(c).1.7. Presentation of ECE recommended standards

Description: Consideration will be given to possible methods of aligning ECE recommended standards to the layout used by ISO and IEC in accordance with recommendation B.6.4.

Method of work: On the basis of a revised secretariat list of ECE-recommended standards and in the light of views to be expressed by other ECE bodies, the Group of Experts will prepare a draft recommendation.

2

1980

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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WORK AREA 01.(c).2.: CERTIFICATION

01.(c).2.1. Certification

Description: Review and promotion of international agreements and other appropriate arrangements on acceptance of certificates of conformity with standards and technical regulations.

Method of work: Consideration at Meetings of Governments Officials and their Group of Experts of appropriate measures on the basis of contributions by ECE Governments and relevant international organizations.

cont.

01.(c).2.2. Guidelines for certification systems

Description: Study of the concepts underlying international, regional and national certification systems.

Method of work: Discussions at meetings of the Group of Experts with a view to presenting draft recommendations to Meetings of Government Officials in due course.

cont.

01(d) - AUTOMATION

Note: At its thirty-fourth session, the Commission adopted its decision 5 (XXXIV) (for the text see Chapter IV above) in which it approved the following programme of work in the field of automation.

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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WORK AREA 01 (d).1: MEDIUM- AND LONG-TERM PERSPECTIVES

01(d).1.1 The prospective medium- and long-term impact of automation on the economy as a whole and on individual industrial branches in particular

Description: The Working Party will consider the impact of automation on selected economic sectors, paying particular attention to the branches of industry dealt with by the Principal Subsidiary Bodies of the Commission.

Method of work: The secretariat will undertake, with the assistance of government rapporteurs and in co-operation with the Senior Advisers to ECE Governments on Science and Technology and the Senior Economic Advisers to ECE Governments, a forecasting study of techno-economic indicators concerning the level of automation in the various branches of the economy, relating the indicators to the growth and efficiency of those branches.

3 1983

01(d).1.2 Technological perspectives in automation

Description: In accordance with the terms of reference established for it by Commission decision J(XXV), the Working Party will make a periodic review of technological developments in automation equipment and their practical applications in the various branches of the economy.

Method of work: Governments will submit to the secretariat, as a part of their country statements considered at the annual sessions, a general analysis of developments and applications concerning automation equipment. The secretariat will include the material in the short background analysis of developments in automation in the countries of the ECE region.
[see 01(d).2.1]

cont.

Estimated duration (in years)	Estimated termination year
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WORK AREA 01(d).2: CURRENT DEVELOPMENTS AND PROSPECTS

01(d).2.1 Review of development in automation in
the ECE region

Description: The Working Party will, at each plenary session, hold a general debate on the situation relating to developments in automation in the ECE region. During this debate views on current trends and policies in ECE countries will be exchanged and attention drawn to problems on which work could usefully be undertaken by the Working Party.

Method of work: The general debate will be based on statements made by delegates on developments in automation of industries in their countries. The country statements will be prepared on the basis of a common framework (see list of points in Annex I to ECE/AUTOMAT/10). The secretariat will use the information available to it to prepare a short background analysis of developments in automation in the countries of the ECE region in the context of general economic developments. In the light of the experience gained at the eighth session the Working Party will consider the possibility of the preparation of periodic surveys of automation of industries in the ECE region [see 01(d).1.2]

cont.

01(d).2.2 Automation of assembly processes in the
engineering industry

Description: The Working Party will analyse the assembly technology for small and large serial production. A review of the equipment available, preconditions for assembly automation and inhibiting factors will be made. Possible fields for international co-operation will be outlined.

Method of work: On the basis of an information notice submitted by the delegation of Hungary and on the information available to the secretariat on the activities of CIRP as well as the proceedings of the seminar to be held in Nottingham (United Kingdom), the Working Party will consider at its eighth session the final outline of this project and will decide on the ways and means for its implementation.

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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WORK AREA 01(d).3: SELECTED ECONOMIC AND
TECHNOLOGICAL PROBLEMS

01(d).3.1 Technical, economic and social aspects
of automated welding

Description: Following the proposal of the Ukrainian SSR, the Working Party agreed to include this topic in its programme of work.

Method of work: This topic will be considered at a seminar in 1980, in Kiev, following the invitation of the Ukrainian SSR. A preparatory meeting will be held in November 1979.

1	1980
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01(d).3.2 The production and use of automation
equipment in the member countries of
the ECE which are developing from
the economic point of view

Description: The Working Party will contribute to the collective efforts of the various organs of the United Nations system to promote the application of science and technology to development. It will seek out specific fields of application in the economically developing countries of the ECE region for the purpose of mutually beneficial industrial co-operation.

Method of work: The delegation of Yugoslavia will submit an outline of a study of trends in the requirements for automated equipment in the industries of the ECE member countries concerned and a techno-economic and social assessment of the installation and use of this equipment and of its production. At its eighth session the Working Party will consider the ways to implement this project, including the possibility of a seminar. The Intergovernmental Bureau for Informatics (IBI) offered its co-operation in this project.

2	1981
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01(d).3.3 Analysis of the introduction of new
production methods in engineering as
related to the man-machine-management
system

Description: Following the conclusions and recommendations of the ECE Seminar in Copenhagen in 1977, the Working Party endorsed the proposal for studying in depth the introduction of flexible automation tools in production systems with due reference to the socio-economic problems of man-machine interfaces.

	<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
<u>Method of work:</u> It was agreed that this project could be dealt with in a seminar which was tentatively scheduled for 1982 in Copenhagen.	1	1982
<u>01(d).3.4 Micro-computers</u>		
<u>Description:</u> On the basis of an information notice submitted by the delegation of the USSR, the Working Party agreed to initiate the work on industrial applications of micro-computers and their economic implications.		
<u>Method of work:</u> ECE countries will submit, by 30 June 1979, further information on this subject. The Working Party will consider the matter, at its eighth session, on the basis of a draft report.	1	1980
<u>01(d).3.5 Computer-Aided Design in Industry</u>		
<u>Description:</u> As a result of the conclusions and recommendations of the ECE Seminar in Prague in 1976, the Working Party endorsed the proposal for studying in depth the development of computer-aided design as an integrated part in manufacturing and its contribution to labour productivity and production efficiency.		
<u>Method of work:</u> A seminar on this subject will be held in Geneva from 14-18 May 1979.	1	1979
<u>WORK AREA 01(d).4: ENVIRONMENTAL AND RESOURCE-SAVING PROBLEMS</u>		
<u>01(d).4.1 Application of automation for monitoring the environment</u>		
<u>Description:</u> The Working Party will contribute to the solution of environmental problems by analysing the practical means of automation for monitoring the environment.		
<u>Method of work:</u> The Working Party will co-operate with other principal subsidiary bodies in this field (Senior Advisers on Environment). It was agreed that the note prepared by the Government of the Byelorussian SSR should be circulated to governments for comments and discussion at the eighth session of the Working Party.	1	1980

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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WORK AREA 01(d).5: STATISTICS AND INFORMATION

01(d).5.1 Development of internationally comparable
statistics on automation

Description: The Working Party will continue to collect and refine statistical information on automation-related equipment, including software, and will make recommendations for improvements in its scope and comparability.

Method of work: The Working Party in co-operation with the Conference of European Statisticians and the ad hoc meeting of experts on engineering industries will prepare statistical tables on the basis of data published in national and international statistics. An ad hoc Meeting will be convened in 1980 jointly with the ad hoc Meeting of Experts on Engineering Industries.

cont.

01(d).5.2 Information exchange system for
automated manufacturing

Description: In order to promote the transfer of technology in automated manufacturing, an information exchange system should be initiated covering the currently available information and its application in the engineering field, both as regards hardware and software.

Method of work: A report will be submitted by the secretariat to governments for comments.

1980

02. - AGRICULTURE

	<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
<u>WORK AREA 02.1: LONG-TERM TRENDS AND PERSPECTIVES</u>		
02.1.1. <u>Periodic review of selected long-term developments in agriculture</u>		
<u>Description:</u> The Committee selects those long-term developments which it wishes to review and decides on an appropriate method of work.	cont.	
02.1.1.1. Long-term market developments		
<u>Description:</u> Pending the decisions to be taken by the Committee whether and when to review supply and demand developments for selected agricultural products.		
<u>Method of work:</u> [Pending the decisions of the Committee]		
02.1.1.2. Reports on output, expenses and income		
<u>Description:</u> Within the actual possibilities of the secretariat for preparing such reports, the Committee has reviewed periodically past trends in output, operating expenses, incomes, investments, etc. of agriculture in ECE countries. This project will be terminated after the publication of the eighth report.		
<u>Method of work:</u> The eighth report in this series, based on the replies to a questionnaire requesting in reduced form the same type of statistical information as the questionnaire adopted for the seventh report in this series, will be produced by the secretariat and submitted for discussion to the thirty-first Committee session.	3	1980
02.1.2. <u>Co-operation with the Senior Economic Advisers on the Over-all Economic Perspective of the ECE Region up to 1990</u>		
<u>Description:</u> Without engaging in any long-term projections of its own, the Committee will consider the Over-all Economic Perspective prepared by the Senior Economic Advisers to ECE Governments, and will make available to the Senior Economic Advisers its comments on the paper as far as it relates to agriculture and as far as countries consider such comments necessary.		

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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Method of work: The secretariat will inform the Committee of relevant documentation for its examination, and will assist it in the work on this project.

3	1979
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02.1.3. Study of long-term perspectives for agriculture in southern Europe (including island countries) with particular reference to the agrarian structures and employment

Description: To be considered by the FAO/ECE Working Party on Agrarian Structure and Farm Rationalization at its third session as to its possible inclusion in the work programme. If this cannot be done in the near future, the Committee will consider at its thirty-first session, whether a technical report on this subject should be prepared under its own auspices.

Method of work: [Pending the decision of the Working Party or the Committee].

WORK AREA 02.2: CURRENT DEVELOPMENTS AND SHORT- AND MEDIUM-TERM PROSPECTS, INCLUDING INTERNATIONAL TRADE

02.2.1. Review of current developments in agriculture and agricultural trade

Description: At its annual sessions the Committee will review the current developments and policy changes in agriculture as well as the recent developments in agricultural trade of the ECE region.

Method of work: On the basis of advance country statements the secretariat will continue to prepare a summary as background documentation for the Committee's discussion. A report on recent developments in agricultural trade and a report on prices of agricultural products and of selected inputs, the latter based on the replies to an annual questionnaire (established in line with the wishes of Governments) will also be prepared by the secretariat for each Committee session.

cont.

02.2.2. Review of the market situation and of the short- and medium-term prospects for selected commodities

Description: The Committee will review at its annual sessions the market situation and the short- and medium-term prospects for selected commodities, notably for cereals, livestock and meat, dairy products and (every other year) eggs.

	Estimated duration (in years)	Estimated termination year
<p><u>Method of work:</u> For each selected commodity a report, intended to serve as background document for discussion, will be produced by the secretariat. Short summaries of the most important market developments for each commodity will be distributed separately to facilitate the discussion. The method of presentation of the secretariat reports prepared for the annual sessions will be reviewed at the thirty-first Committee session.</p>	cont.	
<p>02.2.3. <u>Commodity problems of special interest to the member countries of the ECE which are developing from the economic point of view</u></p>		
<p><u>Description:</u> The Committee will select appropriate commodity problems concerning these countries (including the island countries) for consideration and decide on an appropriate method of work.</p>	cont.	
<p>0.2.2.3.1. Market outlook for flowers and ornamental plants</p>		
<p><u>Description:</u> The Committee, through the Group of Experts on Standardization of Cut Flowers, will evaluate medium-term market prospects and identify the major production problems involved (at the request of interested countries).</p>		
<p><u>Method of work:</u> A revised and more complete version of the secretariat study, which had been submitted to the thirtieth Committee session, will be the subject of in-depth discussion by the Group of Experts on Standardization of Cut Flowers</p>	2	1979
<p>02.2.4. <u>Special activities aimed at promoting and facilitating international trade */</u></p>		
<p>02.2.4.1. Standardization of perishable produce</p>		
<p>(a) Elaboration of new UN/ECE standards</p>		
<p>(i) Eggs products</p>	4	1981
<p>(ii) Dry and dried produce (apricots and figs)</p>	4	1981
<p>(iii) Poultry meat</p>	3	1982

*/ Projects 02.2.4.1. and 02.2.4.2. are carried out by the Working Party on Standardization of Perishable Produce and its Groups of Experts.

	Estimated duration (in years)	Estimated termination <u>year</u>
(b) Revision of UN/ECE standards	cont.	
(c) Collaboration in the FAO/WHO Food Standards Programme (fruit juices and quick frozen food)	cont.	

Description: The Committee through its Working Party will elaborate new and, when necessary, revise existing standards for selected products; it will also continue to collaborate with the FAO/WHO Codex Alimentarius Commission.

Method of work: Work will be conducted by the Working Party on Standardization of Perishable Produce at its annual sessions and by Groups of Experts established by the Working Party for individual product groups and for limited periods (which meet as necessary). cont.

02.2.4.2. International agricultural trade practices

Description: Completion of the harmonization of existing ECE general conditions of sale for agricultural products, followed by the elaboration of general conditions of sale for milk and milk products.

Method of work: The work will be conducted by the Group of Experts on International Trade Practices of the Working Party on Standardization of Perishable Produce. 3 1982

WORK AREA 02.3: SELECTED ECONOMIC AND TECHNOLOGICAL PROBLEMS

02.3.1. Studies of problems relating to agrarian structure and farm rationalization */

02.3.1.1. Economic efficiency of the main categories of farms and agricultural enterprises in ECE countries (with reference to specific products)

Description: Subject for study selected by the FAO/ECE Working Party on Agrarian Structure and Farm Rationalization at its first (constituent) session.

*/ The projects under this heading are carried out by the FAO/ECE Working Party on Agrarian Structure and Farm Rationalization; this Working Party is also concerned with the joint symposium listed under 02.3.5.4. and any future action under project 02.1.3.

	Estimated duration (in years)	Estimated termination year
<u>Method of work:</u> Several case studies analysing the situation in selected ECE countries will be prepared by government rapporteurs and discussed at the third session of the Working Party.	3	1979
02.3.1.2. Growing relationships between agriculture and other sectors of the economy (including the effects of economic growth) and consequences for the agrarian structure		
<u>Description:</u> Subject selected by the Working Party to study the impact of the growing interdependence of agriculture with the rest of the economy and of economic growth (and its changes) on agrarian structures.		
<u>Method of work:</u> Discussion at the fourth session of the Working Party on the basis of case studies prepared by government rapporteurs.	2	1981
02.3.2. <u>Studies of problems relating to agricultural mechanization</u> */	cont.	
02.3.2.1. Annual review of recent developments and changes in agricultural mechanization	cont.	
02.3.2.2. Studies of energy problems relating to mechanization		
(a) Means of Reducing Energy Consumption in Engines and Tractors	3	1979
(b) Biogas Production from Organic Agricultural Wastes	3	1980
02.3.2.3. Work on terminology (Terms and definitions of soil preparation)	5 - 6	1982-1983
02.3.2.4. Reports on more specific technical problems		
(a) Methods and Equipment of Protection from Frost Damage	2	1979

*/ All projects under this heading are carried out by the FAO/ECE Working Party on Mechanization of Agriculture; this Working Party is also concerned with the joint symposium listed under 02.3.5.4. and with the environmental problems which appear under 02.4.1.

	Estimated duration (in years)	Estimated termination year
(b) Technology of Storage and Mechanization of work in Vegetable Store-Houses	2	1979
(c) Developments in Self-Propelled Crop Harvesters	2	1979
(d) Methods and Equipment for the Mechanization of Harvesting and Storing Crop By-Products	2	1979
(e) Methods and Mechanical Equipment for Increasing the Nutritive Value of Straw	2	1979
02.3.2.5. Annotated outlines of reports proposed for inclusion in the work programme		
(a) Technical Aspects Contributing to Optimal Utilization of Agricultural Machinery	3	1979
(b) Methods and Equipment for Sub-soiling	2	1979
(c) Methods and Equipment for the Mechanization of Agricultural Work on Sandy Soils	3	1979
(d) Changes and Trends in the Quantity and Balance of Energy Consumption in Agriculture	2	1979
(e) Review of Existing Technological Processes in the Mechanization of Crop Production in Order to Reduce Energy Consumption	2	1979
02.3.2.6. Present and Foreseeable Trends in the Mechanization of Agriculture (Horizon 1990) (Preparation of national reports)		
	1	1979

Description: All studies listed under project 02.3.2. are (or will be) selected by FAO/ECE Working Party on Mechanization of Agriculture and approved by the Committee.

Method of work: Studies and reports prepared by government rapporteurs (or teams of government rapporteurs) and discussed at the annual sessions of the Working Party. These reports are selected provisionally at the annual sessions for confirmation at the following session on the basis of annotated outlines and announced national contributions of material.

cont.

	Estimated duration (in years)	Estimated termination year
02.3.3. <u>Marketing problems relating to agricultural products</u>		
02.3.3.1. The role of co-operation (in the form of co-operatives and in other forms) in agricultural and food marketing		
<u>Description:</u> Discussion in depth of the role of co-operation in all its legal forms to improve the position of agricultural producers in the marketing of agricultural and food products.		
<u>Method of work:</u> Symposium to be held in Geneva	2	1980
02.3.4. <u>Selected technological and economic problems relating to land use, soil fertility and crop production</u>		
02.3.4.1. Economic and technological aspects of sugar beet production		
<u>Description:</u> Discussion in depth of the economic and technological problems relating to sugar beet production in the ECE region.		
<u>Method of work:</u> Symposium to be organized by the Ukrainian SSR and the USSR and to be held in the Ukrainian SSR.	2	1979
02.3.4.2. Methods of combating erosion, recultivating land and improving soil quality		
<u>Description:</u> A review of current problems, methods and measures and of the experience gained by countries in combating soil erosion, recultivating land and improving the quality of the soil.		
<u>Method of work:</u> Technical report prepared by a government rapporteur (or rapporteurs) on the basis of material supplied by countries in reply to a questionnaire.	2	1980
02.3.4.3. Triticale		
<u>Description:</u> Review of national research and experience relating to triticale and the improvement of its yields, quality, resistance to diseases, cold and drought.		
<u>Method of work:</u> Technical report prepared by a government rapporteur (or rapporteurs) on the basis of material supplied by countries in reply to a questionnaire.	2	1980

	<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
02.3.4.4. Maize		
<u>Description:</u> Discussion in depth of all aspects relating to the production, technology and consumption of maize.		
<u>Method of work:</u> Symposium to be organized by and in Yugoslavia.	1	1980
02.3.4.5. New developments in the field of fertilizers		
<u>Description:</u> The subject or subjects to be discussed will be decided by the Committee at its thirty-first or thirty-second session.		
<u>Method of work:</u> Symposium to be held in Geneva.	2	1983
02.3.4.6. Problems of land use and land-use planning		
<u>Description:</u> To be decided by the Committee at one of its next sessions in the light of the decisions taken by the thirty-fourth session of the Economic Commission for Europe.		
<u>Method of work:</u> [To be determined by the Committee.]		
02.3.5. <u>Selected technological and economic problems relating to animal production and feedingstuffs */</u>		
02.3.5.1. Genotype X keeping conditions, animal welfare and protection		
<u>Description:</u> Study of the specific keeping conditions of large intensive animal breeding which requires other genetic "models" than the keeping conditions of extensive breeding to achieve optimum results, and of the relevant aspects of animal welfare and protection.		
<u>Method of work:</u> Technical report prepared by a government rapporteur (or rapporteurs) on the basis of material supplied by countries in reply to a questionnaire.	2	1980

*/ See also project 02.4.3. (pollution from animal production).

	Estimated duration (in years)	Estimated termination year
02.3.5.2. Feeding methods		
<u>Description:</u> Study of the feeding methods in large livestock farms and of the possible diets best adapted to intensive production.		
<u>Method of work:</u> Technical report prepared by a government rapporteur (or rapporteurs) on the basis of material available from earlier projects and from the work of other international organizations.	2	1980 or 1981
02.3.5.3. Observations on the practical use of new sources of protein in relation to energy supply for high production of milk and meat		
<u>Description:</u> Discussion in depth of the problem that the protein supply by itself does not solve the physiological problems of high-yielding cattle, but has to be seen in relation to the over-all energy availabilities in feed supplies.		
<u>Method of work:</u> Symposium to be held in Geneva.	2	1981
02.3.5.4. Managerial and economic aspects of large livestock farms, and technical, economic and sanitary aspects of their buildings and equipment		
<u>Description:</u> Discussion in depth of all aspects relating to the practical organization and the management of large livestock farms and to their fixed capital (as regards buildings, machinery and other technical equipment).		
<u>Method of work:</u> Joint symposium of the FAO/ECE Working Parties on Agrarian Structure and Farm Rationalization and on Mechanization of Agriculture	2	1981
02.3.5.5. The problems of large livestock farms		
<u>Description:</u> Final evaluation by the Committee of the economic, technical, managerial, environmental and sanitary aspects of large livestock farms.		
<u>Method of work:</u> A summary report, prepared by a government rapporteur (or rapporteurs), drawing the conclusions from the results of projects 02.3.5.1. to 02.3.5.4. and 02.4.3., and submitted to the Committee for in-depth discussion.	2	1982

Estimated duration (in years)	Estimated termination year
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02.3.6. Studies of particular interest to the member countries of the ECE developing from the economic point of view (including island countries)

Description: As far as appropriate, the special interests of the members countries of the ECE developing from the economic point of view are to be taken into account in all projects appearing above under Work Area 02.3. In addition, when the occasion arises, the Committee will decide on subjects to be studied specifically in the interest of the member countries of the ECE developing from the economic point of view.

Method of work: [To be determined by the Committee.] cont.

WORK AREA 02.4: ENVIRONMENTAL PROBLEMS RELATING TO AGRICULTURE

02.4.1. Environmental problems relating to agricultural mechanization

02.4.1.1. Studies of environmental aspects of mechanization */

- | | | |
|---|---|------|
| (a) The Role of Agricultural Mechanization in Preserving the Environment in Hilly and Mountainous Areas | 3 | 1979 |
| (b) Methods and Equipment for the Application of Chemical Products in Agriculture | 3 | 1979 |
| (c) Cleaning, Handling and Drying of Poultry Manure | 3 | 1980 |
| (d) Swine Waste Handling Systems | 3 | 1980 |

Description: All studies are selected by the FAO/ECE Working Party on Mechanization of Agriculture and approved by the Committee.

*/ See also project 02.3.2.

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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Method of work: Studies and reports are prepared by government rapporteurs (or teams of government rapporteurs) and discussed at the annual sessions of the Working Party. These reports are selected provisionally at the annual sessions for confirmation at the following session on the basis of annotated outlines and announced national contributions of material.

cont.

02.4.2. The effects of pollution on vegetation
(crops and forests)

Description: At the suggestion of UNEP, the Committee will organize a symposium to study in depth the effects of pollution on crops and forests.

Method of work: A symposium to be held in Poland, to be organized jointly with the Timber Committee and FAO, and in co-operation with the Senior Advisers to ECE Governments on Environmental Problems and UNEP.

2

1979

02.4.3. Pollution from animal production

Description: As a follow-up to the seminar on pollution of waters by agriculture and forestry, held in 1973, a review of the techniques for the prevention of pollution originating from animal production.

Method of work: Seminar organized jointly with the ECE Committee on Water Problems. A preparatory meeting will be convened in 1980 to formulate the programme of the seminar.

2

1981

02.4.4. Study on pollution problems in agriculture

Description: The Committee will decide on specific subjects under this project at a later date.

Method of work: [To be determined by the Committee.]

Estimated duration (in years)	Estimated termination year
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WORK AREA 02.5: STATISTICS

02.5.1. Harmonization and improvement of food and
 agricultural statistics */

cont.

Description: Harmonization, improvement and development of food and agricultural statistics jointly with the Conference of European Statisticians and FAO.

Method of work:

- | | | |
|--|---|------|
| (a) Preparation of a European Handbook of Economic Accounts for Agriculture covering both SNA and MPS types of accounts and links between them, presenting the set-up of the whole system, but with detailed presentation only of the commodity, production and capital formation accounts; further work on income and outlay accounts and capital formation accounts (by the joint secretariats). | 3 | 1979 |
| (b) Development of production and utilization statistics for other products, with priority for sugar beets and sugar, oil seeds (including oil and oil-cakes), and possibly followed by: potatoes, tobacco and fibre crops; informal meetings on these subjects as required. | 1 | 1979 |
| (c) Review and updating of earlier recommendations on statistics and balances for meat and milk; meeting on the subject. | 1 | 1980 |
| (d) Study of problems involved in statistics of the agricultural labour force and labour input; the need for and timing of a meeting on this subject to be considered later. | 3 | 1980 |
| (e) Preparation of a draft programme of statistics of food consumption and nutrition; circulation of the draft programme for comments; meeting to consider the draft programme. | 3 | 1980 |

*/ The projects under this heading are carried out by the FAO/ECE/CES Study Group on Food and Agricultural Statistics in Europe.

	Estimated duration (<u>in years</u>)	Estimated termination <u>year</u>
(f) Study of methodological questions relating to farm book-keeping data and the possibility of their harmonization with other agricultural statistics; the need for, and timing of, a meeting on this subject to be considered later.	2	1981
(g) Preparation of a glossary of terms used in agricultural statistics in the working languages of the region.	3	1982
(h) Over-all review of agricultural statistics in the light of developments of data requirements; preparation of a draft programme, serving as a framework for the systematic presentation of the data requirements; meeting to consider the draft programme.	4	1983

03. - CHEMICALS

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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WORK AREA 03.1: MEDIUM- AND LONG-TERM PERSPECTIVES

03.1.1. Conservation of Energy in the Chemical Industry

Description: The Committee will assess the prospects for conservation of energy by the chemical industry, especially in the production of major, energy-intensive chemicals. The study will cover the main factors influencing energy savings, including modernization of processes and equipment, trends in the use of various energy sources and carriers, and optimization of energy consumption.

Method of work: Under the guidance of an ad hoc Meeting of Experts the secretariat has initiated a study of what means of conservation have been developed, what degrees of energy conservation can be potentially achieved, and what national programmes are being developed for the chemical industry.

2	1979
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03.1.2. Forecasting, planning and programming in the chemical industry

Description: The purpose of this project is to explore in depth the systems of forecasting, programming and planning in the chemical industry applied by various member countries.

Method of work: A seminar will be held on 10-14 September 1979 in Poland at the invitation of the Polish Government. Details of the objectives and the scope of the seminar have been determined by the Preparatory Meeting for the seminar, which was held on 2-3 March 1978.

1	1979
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03.1.3. The chemical industry and its role in future food production

Description: The Committee will examine the impact of the chemical industry on world food production in such areas as fertilizers, insecticides, fungicides, animal feeds, preserving agents, etc.

Method of work: Following the seminar held in Helsinki (Finland) in 1975, on Technical and Economic Aspects of the Fertilizer Industry, a major study will be prepared by the secretariat with the assistance of government rapporteurs. Subsequently a symposium will be organized to follow up and highlight specific aspects of the study in order to formulate concrete recommendations

2	1983
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<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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03.1.4. Co-operation with the Senior Economic Advisers
to ECE Governments on the Over-all Economic
Perspective for the ECE Region up to 1990

Description: The Committee will consider and comment on the Over-all Economic Perspective prepared by the Senior Economic Advisers to ECE Governments, and will make available to the Senior Economic Advisers to ECE Governments the results of its work on such projects as 03.1.2 and 03.1.3 as a contribution to these activities

Method of work: The secretariat will prepare, as appropriate, the necessary documentation for the Committee's examination and will assist it in carrying out its work on this project.

2

1982

WORK AREA 03.2: CURRENT DEVELOPMENTS AND PROSPECTS
INCLUDING INTERNATIONAL TRADE

03.2.1. Annual Review of the Chemical Industry

Description: At its annual sessions the Committee will closely follow and analyse developments in the chemical industry. One major tool is the Annual Review of the Chemical Industry which will be considered annually by the Committee

Method of work: The Annual Review of the Chemical Industry will be prepared by the secretariat, based on statistical information covering all major chemical products/product areas transmitted by member governments. The draft of the Annual Review will be circulated each year before the annual session of the Committee. Upon approval of the draft by the Committee the secretariat will prepare and issue the final version.

cont.

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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03.2.2. Market Trends and Prospects for Selected Chemical Products

Description: The Committee will put major emphasis on the examination of certain structural developments in the chemical industry. Of particular interest are changes occurring in various sectors of the industry, new developments to be observed in various product groups as well as in key indicators of the industry such as gross output, value added, investment, employment and trade

Method of work: Once in every five years the secretariat will prepare - under the guidance of the Group of Experts on the Periodic Survey - a five-year survey, Market Trends and Prospects for Chemical Products, which will be based on the annual data for the Review, and accompanied by a comprehensive general review of the situation in the chemical industry in the ECE region. The five-year survey will provide a basis for periodic examination by the Committee of trends and prospects of the chemical industry

cont.

WORK AREA 03.3: SELECTED ECONOMIC AND TECHNOLOGICAL PROBLEMS

03.3.1. The use of polymer materials in the construction industry

Description: The Committee will study the present application of synthetic polymer materials especially plastics, paints and synthetic fibres in the construction industry, analyse trends of major construction technologies in order to determine the impact of chemical products on the construction industry.

Method of work: The final version of this study will be completed by the secretariat in the first half of 1979.

2

1979

03.3.2. Fertilizers required to meet soil, crop and other conditions of developing countries

Description: As a follow-up to the recommendations of the Helsinki Seminar on Technical and Economic Aspects of the Fertilizer Industry, the Committee will study specific aspects of the fertilizer industry.

Method of work: Will be decided when the study is initiated

3

1984

	<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
<p>03.3.3. <u>Prospects for the Development of Carbo-chemistry in the ECE Region</u></p> <p><u>Description:</u> An analysis of the prospects for the development of carbo-chemistry and especially the utilization of coal as a raw material for the chemical industry will be made.</p> <p><u>Method of work:</u> This topic will be handled by a task force within the framework of the programme of work.</p>	2	1980
<p><u>WORK AREA 03.4: SELECTED ENVIRONMENTAL AND RESOURCE- SAVING PROBLEMS</u></p>		
<p>03.4.1. <u>Utilization of wastes by the chemical industry</u></p> <p><u>Description:</u> The Committee will study the utilization of wastes of the chemical industry or the wastes from other industries, to be used as raw materials for the chemical industry. This study will complement the study on Technical Progress and its Role in Combating High Waste Technologies in the Inorganic Chemical Industry as well as the Seminar on Recycling of High-Polymer Wastes.</p> <p><u>Method of work:</u> An <u>ad hoc</u> Meeting of Experts formulated the outline and the methods of work to be used for this project and a second meeting held in June 1978 reviewed the first draft of this study and made recommendations for its completion.</p>	2	1979
<p>03.4.2. <u>Use as chemical raw materials of natural products (cellulose) or those from the sea</u></p> <p><u>Description:</u> Against the background of the rising cost of traditional chemical raw materials, the Committee will explore the possibilities of alternative sources.</p> <p><u>Method of work:</u> To be defined when work is initiated</p>	2	1982
<p>03.4.3. <u>Use of chemical treatment for reducing atmospheric pollution by sulphur oxide and gaseous pollutants in general</u></p> <p><u>Description:</u> The Committee will continue to examine environmental problems related to the chemical industry, particularly in respect of air and water pollution and the use of water resources.</p> <p><u>Method of work:</u> To be determined when work is initiated, possibly in co-operation with the Senior Advisers to ECE Governments on Environmental Problems</p>	2	1985

	<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
03.4.4. <u>Study of the noxious effects of specific chemical substances, such as polyvinylchloride</u>		
<u>Description:</u> Within the framework of the Committee's activities on the discharge of toxic substances specific case studies will be examined.		
<u>Method of work:</u> To be determined when work is initiated	2	1983
03.4.5. <u>Current pollution standards in the fertilizer industry</u>		
<u>Description:</u> In accordance with the recommendations of Seminar on Technical and Economic Aspects of the Fertilizer Industry, the Committee will consider and analyse current pollution standards effective in member countries, with a view to assisting Governments in their policy-making decisions.		
<u>Method of work:</u> To be determined when work is initiated	2	1984
<u>WORK AREA 03.5: STATISTICS AND INFORMATION</u>		
03.5.1. <u>Bulletin of imports and exports of chemical products</u>		
<u>Description:</u> The Committee will continue to promote the collection of statistics on a comparable basis regarding the chemical industry, its raw material sources and its markets		
<u>Method of work:</u> The secretariat will collect the requisite information from available United Nations statistical sources and publish an <u>Annual Bulletin of Trade in Chemical Products</u> , covering exports and imports of chemical products		
		cont.
03.5.2. <u>Development of internationally comparable statistics and statistical classification</u>		
<u>Description:</u> The Committee will (a) advise the secretariat on the collection and preparation of statistics on the chemical industry, on a comparable basis for ECE countries and others; (b) give guidance to the secretariat on its annual updating of statistical information on the principal chemical products dealt with in the quinquennial survey; (c) examine methodological questions concerning concepts, definitions and methods of measurement; (d) guide the secretariat in developing a methodology of		

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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statistical analysis and forecasting of production, consumption and trade of chemical products; and (e) promote the collection of statistics on the chemical industry, its raw material sources and its markets.

Method of work: Work is pursued by the secretariat, as necessary, in co-operation with the secretariats of other bodies concerned. Ad hoc meetings on specific questions will be held jointly by the Committee and the Conference of European Statisticians as required.

cont.

04. - COAL

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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WORK AREA 04.1: MEDIUM AND LONG-TERM PROSPECTS

04.1.1. Future role of coal in the energy economy
of the region

Description: The Committee will examine the long-term prospects for coal in the context of the national and world energy economies, with a view to identifying and assessing emerging trends and problems affecting demand and supplies of coal, related government policies, and options for intergovernmental co-operation within ECE.

04.1.1.1. Prospects of the coal industry in the ECE region	cont.	
04.1.1.2. Long-term prospects for coal beyond 1985	3	1981
04.1.1.3. The future role of coal in supplying the ECE region with energy and raw materials, in the light of new techniques of coal conversion and coal utilization	2	1981

Method of work: Project component 04.1.1.1. will be examined by the Committee at its sessions once every two years or, if special aspects are to be singled out, by the appropriate subsidiary bodies, either through a study or a symposium. Project component 04.1.1.2. has been assigned to the Working Party on Coal Trade. Component 04.1.1.3. will be implemented on the basis of the results of the Symposium on the Gasification and Liquefaction of Coal, to take place at Katowice (Poland) from 23 to 27 April 1979

	<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
04.1.2. <u>Co-operation with the Senior Economic Advisers to ECE Governments on the Overall Economic Outlook for the ECE region up to 1990</u>		
<u>Description:</u> The Committee, particularly through its Working Party on Coal Trade, will consider and comment upon the Overall Economic Outlook prepared by the Senior Economic Advisers to ECE Governments, and will make available to the Senior Economic Advisers the results of its work on the relevant projects (e.g. 04.1.1. and 04.2.2.), for use in their work		
<u>Method of work:</u> The secretariat will prepare the documentation which the Committee will need for its study and will assist it in its work in accordance with decision G (XXXII)		
	2	1979
<u>WORK AREA 04.2: CURRENT DEVELOPMENTS AND PROSPECTS, INCLUDING INTERNATIONAL TRADE</u>		
04.2.1. <u>Review of the short-term fluctuations in demand for and supply of solid fuels</u>		
<u>Description:</u> The Committee will follow demand/supply fluctuations closely with a view to avoiding or alternating imbalances		
04.2.1.1. Review of the coal market with particular reference to supplies of and demand for solid fuels	cont.	
04.2.1.2. International trade in steam coal and coking coal	cont.	1980
04.2.1.3. Transport and transmission problems connected with the development of "distant" coalfields	2	1979
<u>Method of work:</u> Project components (1) and (2) will be considered twice a year by the Working Party on Coal Trade on the basis of forecasts supplied by Governments and consolidated by the secretariat. Project component (3) is under consideration by the Working Party on the basis of national reports		

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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04.2.2. Review of the coal-market situation and prospects in the light of government plans and policies

Description: The purpose of this project is to promote exchanges of views and information on national coal policies in the context of national energy policies; to assess the development of major underlying factors; to compare such policies; and to identify areas in which intensified **intergovernmental** co-operation might be mutually beneficial. The results of the Committee's consideration of these problems will be made available to the Senior Economic Advisers to ECE Governments (see 04.1.2 above)

04.2.2.1. Annual survey of the coal situation in 19.. and its prospects

cont.

Method of work: The Committee will implement project component 04.2.2.1. through annual surveys of the coal situation prepared by the secretariat on the basis of government replies to a questionnaire. Reports of particular relevance to the activities of the Senior Economic Advisers will be made available to them for information and appropriate use in their work

04.2.3. Coal utilization in selected consumption sectors

Description: The purpose of this project is to improve the understanding of short-term and medium-term consumption trends and to consider related policy measures

04.2.3.1. Review of coal-market trends by consumption sectors

cont.

04.2.3.2. Use of steam coal in power stations

3

1980

04.2.3.3. Use of coal, including formed coke, in the metallurgical industry

3

1983

Method of work: The project will be implemented by studies or symposia under the auspices of the Working Party on Coal Trade in close co-operation with the other principal subsidiary bodies concerned

	<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
<u>WORK AREA 04.3: SELECTED ECONOMIC AND TECHNOLOGICAL PROBLEMS</u>		
04.3.1. <u>Productivity in underground coal mining</u>		
<u>Description:</u> The purpose of this project is to enhance technology transfer and industrial co-operation in underground mining through an exchange of information and experience in advanced mining technologies. While this work is mainly concerned with technical aspects, due account will be taken of related management problems, labour productivity, production costs, environmental implications, etc. Major problems considered will be:		
04.3.1.1. Mechanization and automation		
(a) Consideration, in the light of examples of high-productivity mines and faces, of factors influencing labour productivity	cont.	
(b) Technical advances in the mechanization and automation of face work in steeply-sloping seams (35-90°); choice of methods of working such seams according to geological, technical and economic conditions	2	1980
(c) Technical advances in the mechanization and automation of face work in thin (less than 1.2 m), gently-sloping seams (0-35°); choice of methods of working such seams according to geological, technical and economic conditions	3	1981
(d) Exchange of experience in coal extraction under buildings and industrial plants	3	1981
04.3.1.2. Training of miners and of scientific and technical personnel		
(a) Qualifications required at present, or to be required in the future, of mine personnel and members of coal-industry technical and scientific management staffs; possibilities and methods of encouraging executive personnel to work in the coal industry	2	1980

	<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
04.3.1.3. Concentration of operations		
(a) Concentration indices in European coal industries	cont.	
<p><u>Method of work:</u> The project will be implemented by the Group of Experts on Productivity and Management Problems in the Coal Industry. As a rule, the work of this Group will be based on comprehensive country monographs prepared along agreed lines. After consideration, these monographs will be consolidated in a report highlighting common trends, differences, and areas in which industrial co-operation could be reinforced.</p>		
04.3.2. <u>Economic and technical problems linked with the further development of opencast mining</u>		
<p><u>Description:</u> The purpose of this project is to promote and develop exchanges of experience and views on opencast-mining technologies and related economic, environmental, operational and other problems with a view to speeding up the transfer of advanced technologies and identifying areas in which intergovernmental and industrial co-operation is feasible. The problems selected for consideration by the Committee are:</p>		
04.3.2.1. Use of high-efficiency equipment in opencast workings	2	1979
04.3.2.2. Concentration indices for opencast mines	cont.	
04.3.2.3. Development and operation of high-powered mineworking and transport equipment to operate in difficult technical and climatic conditions		
(a) Development of optimum technological flowsheets for line production at opencast workings	2	1979
(b) Development of cyclical/line production systems in opencast coalmining	3	1981
04.3.2.4. Mechanization of auxiliary processes in opencast coalmining		
(a) Development and operation of auxiliary mechanisms for use in conjunction with basic mining equipment	2	1979

	<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
04.3.2.5. Drainage and geomechanics in opencast coalmining		
(a) Methods of increasing the stability of stripping and spoil benches in the operation of powerful coal-winning and haulage equipment	2	1979
04.3.2.6. Work safety and environmental protection (see also 04.4.1.)		
(a) Study on surfacing materials for opencast mines suited to land reclamation after the continuous use of powerful equipment and high-productivity stripping operations	3	1981
04.3.2.7. Better use of available coal resources and increased economy and efficiency of coal extraction techniques.	2	1980

Method of work: The project will be implemented by the Group of Experts on Opencast Mines. A Symposium on topic 04.3.2.1. will be held at Cottbus (German Democratic Republic) from 16 to 19 October 1978

04.3.3. International co-operation on R and D projects

Description: This project entails a review of the work of national mining research institutes. It aims at promoting exchanges of scientific, technical and economic information on topical R and D activities and at identifying areas of common interest suitable for joint co-operative research. The following project components will be considered:

04.3.3.1. Review of the activities of different European countries' national mining-research institutes, and exchange of scientific, technical and economic information relating to the coal industry	cont.	
04.3.3.2. Co-operation in research on selected projects		
(a) Coal-getting without permanent manning of the coal face; present development and future prospects	2	1980
(b) Application of automation to coal-haulage systems		

	<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
(c) Development of opencast-working techniques	2	1980
(d) Driving, working and supporting headings and coal faces in deep mines (1,000 metres and more), i.e. in geologically and climatically more difficult mining conditions. Study of this topic could be started at the fifth session of the Meeting of Directors	2	1982

Method of work: The project is to be implemented by the Meetings of Directors of National Mining Research Institutes, which are to be held every two years. It will include visits to national R and D institutes and study tours to coalfields. Selected problems will be the subject of symposia organized in close co-operation with the other subsidiary organs of the Committee which are concerned, and with any other principal subsidiary body of the Commission which may be interested in the subject.

04.3.4. New uses for coal

Description: Exchanges of information and views on this subject will aim at identifying new uses for coal, accelerating technical progress in coal preparation, conversion and use, facilitating technology transfer, and initiating industrial co-operation in areas of common interest. While attention will be mainly focused on the technical aspects of coal preparation and use, consideration will also be given to related questions of economic viability, environmental acceptability and operational feasibility. The following project components will be considered:

04.3.4.1. Gasification and liquefaction of coal

- | | | |
|---|---|------------|
| (a) Consideration of the advisability of, and procedure for, establishing an ECE co-ordinating centre on coal gasification and liquefaction | 1 | 1979 |
| (b) Symposium on the gasification and liquefaction of coal (see also 04.5.1.2.) | | April 1979 |

04.3.4.2. Use of solid fuels in the metallurgical industry

- | | | |
|--|---|------|
| (a) Automation of coking plants and the use of computers not only at the design stage but also for process optimization and monitoring | 1 | 1979 |
|--|---|------|

	<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
04.3.4.3. Selected problems of coal preparation and use		
(a) Mechanization and automation of coal preparation plants	2	1980
(b) Preparation of brown coals according to their various applications; automation and mechanization of such processes	2	1980
(c) Fluidized-bed combustion	2	1980
(d) Household use of coal and of solid fuels manufactured from coal	3	1981
(e) Information on the work of other ECE subsidiary bodies on the use of low-calorific-value fuels.	3	1981

Method of work: The project will be implemented by the Group of Experts on the Utilization and Preparation of Solid Fuels. As regards gasification and liquefaction of coal, a symposium is scheduled to take place in Poland from 23 to 27 April 1979; an ad hoc meeting will be held from 19 to 21 February 1979 to study in detail the idea of establishing an ECE co-ordinating centre on coal gasification and liquefaction.

The Committee will ensure close co-operation with the Chemical Industry Committee, the Committee on Electric Power, the Committee on Gas, the Senior Economic Advisers, and any other principal subsidiary bodies concerned. As regards the other project components, the Group of Experts will undertake studies along agreed lines. As a first step, country monographs will be prepared by government rapporteurs on the basis of an agreed outline. After consideration by the Group of Experts, these monographs will be consolidated in a general report reflecting common trends and identifying areas of potential industrial co-operation (see also project 04.1.1.3)

04.3.5. Harmonization of trade classifications, standards and certifications

Description: The purpose of this project is to facilitate international coal trade through the elaboration of agreements on trade classifications, standards and certifications

	<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
04.3.5.1. Need for and method of preparing a modified ECE classification of coals by type; ways and means of promoting co-operation in this area between ECE countries and other interested countries	1	1979

Method of work: The project component will be implemented, on the basis of a survey, by the Group of Experts on the Utilization and Preparation of Solid Fuels. An ad hoc meeting of experts on coal classification by type will be held from 21 to 23 February 1979 to draw up a programme of work leading to the establishment of a modified ECE classification of coals by type

WORK AREA 04.4: SELECTED ENVIRONMENTAL AND RESOURCE-SAVING PROBLEMS

04.4.1. Environmental problems resulting from coal-mining and ancillary activities

Description: Through exchanges of relevant information and experience the Committee will endeavour to promote the environmental acceptability of coal production, conversion and use. The following problems will be studied:

- | | | |
|---|-------|------|
| 04.4.1.1. Environmental problems resulting from coal industry activities | cont. | |
| 04.4.1.2. Desulphurization of coal | 2 | 1979 |
| 04.4.1.3. Environmental protection in opencast mines (see also 04.3.2.6.) | | |

Method of work: Project component (2) will be dealt with at the Symposium on the Gasification and Liquefaction of Coal (Poland, 1979). Project component (3) is related to project 04.3.2.6., put in hand by the Group of Experts on Opencast Mines. In all cases the Committee will ensure close co-operation with other principal subsidiary bodies concerned, and in particular with the Senior Advisers to ECE Governments on Environmental Problems

04.4.2. Reduction of waste and increased efficiency in the mining, processing, transport and use of coal

Description: Through exchanges of relevant information and experience the Committee will seek to promote a more careful utilization of scarce natural resources and to reduce the technical and economic constraints

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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which have hitherto impeded the furtherance of efficiency. The following problems will be considered:

- 04.4.2.1. Review of opportunities for improved utilization of coal reserves so as to enhance economic efficiency in the working of coal

1

1979

Method of work: In respect of underground mining, the project component will be considered by the Group of Experts on Productivity and Management Problems in the Coal Industry, and, in respect of surface mining, by the Group of Experts on Opencast Mines. This study will be based on country reports which will be consolidated in 1979 into a general report

WORK AREA 04.5: INDUSTRIAL CO-OPERATION

- 04.5.1. Examination of possibilities for industrial co-operation

Description: With a view to furthering technology transfer and industrial co-operation the Committee will examine the possibility of rendering its activities more operational, of undertaking joint research in suitable cases, and of arranging for the exchange of scientific and technical personnel

- 04.5.1.1. Detailed information on research institutes and their basic programmes

cont.

- 04.5.1.2. An exhibition of relevant equipment, appliances and services will be organized at the Symposium on the Gasification and Liquefaction of Coal (Poland, April 1979)

2

1979

Method of work: Project component (1) will be implemented by the Meeting of Directors of National Mining Research Institutes (see also 04.3.3.), and project component (2) by the Group of Experts on the Utilization and Preparation of Solid Fuels (see also 04.3.4.1. (b)). The Committee will establish, where needed, close co-operation with the principal subsidiary bodies concerned, and, in particular, with the Committee on the Development of Trade

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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04.5.2. Selected problems of industrial co-operation
with member countries of the ECE which are
developing from the economic point of view

Description: The expected considerable increase in coal production and use in ECE countries which are developing from the economic point of view (see ECE/COAL/16, part II F) necessitates measures to facilitate and accelerate the transfer of technology from the traditional coal countries to these other countries. The purpose of the present project is to accelerate such transfer

cont.

Method of work: The Committee will keep in mind in the execution of its entire work programme, and also through the participation of member countries in international events such as, in particular, the Symposium on World Coal Prospects (Poland 1979), the needs of countries with newly-developing coal industries

WORK AREA 04.6: STATISTICS AND INFORMATION

04.6.1. Periodic bulletins of coal statistics

Description: The Committee will continue to collect, publish and review internationally comparable information on production, consumption, exports, imports, stocks, manpower and productivity

cont.

Method of work: The secretariat will collect the quarterly and annual data issued by Governments and will publish them in the Quarterly and Annual Bulletins in line with the guidance provided by the Group of Experts on Coal Statistics and by the Conference of European Statisticians

04.6.2. Development of internationally comparable
statistics

Description: The purpose of this project is to meet the need for internationally comparable data on topics which are not yet covered, or cannot be covered, by the regular Bulletins on Coal Statistics. The following subjects will be studied

04.6.2.1. Capital formation, production costs and investment intentions in the European coal industries, particular account being taken of the need for international comparability of recording methods

cont.

	<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
04.6.2.2. Use of computers in solving the European coal industries' statistical problems (this project component will deal with the storage, retrieval and processing of computerized statistical data, and will accordingly affect almost all other project components)	cont.	
04.6.2.3. Comparative analysis of national systems of recording labour consumption in the coal-mining industry	1	1979
04.6.2.4. Statistical methods of recording and analysing working time at mechanized coal faces in order to minimize lost time	2	1980
04.6.2.5. International definitions, standards and classification of different types of solid fuel	2	1980
04.6.2.6. Analysis of investment components in new mines in relation to their projected output	2	1980
04.6.2.7. International comparability of numbers of surface workers at coal mines and their influence on productivity	3	1981

Method of work: The project will be implemented by the Group of Experts on Coal Statistics in close co-operation with the Conference of European Statisticians

04.6.3. Use of computers in the coal-mining industry

Description: This project provides for an exchange of experience on the use of computers in process control in the coal-mining industry

04.6.3.1. Automation of coking plants and the use of computers not only at the design stage but also for process optimization and monitoring	1	1979
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Method of work: The project component is being implemented by the Group of Experts on the Utilization and Preparation of Solid Fuels (see 04.3.4.2.)

2	1979
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04.6.4. Exchange of non-statistical information

Description: This project aims at facilitating contacts and access through the exchange of addresses, organigrams, directories, bibliographies, work programmes, activity reports, etc.

	<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
04.6.4.1. Addresses of government authorities, major enterprises, associations and institutes, working in the area of coal (see also 04.5.1.1.)	cont.	
04.6.4.2. Reports transmitted by intergovernmental organizations on activities of interest to the Coal Committee	cont.	
04.6.4.3. List of documents published by ECE concerning energy	cont.	
04.6.4.4. Study tour of the Committee in Yugoslavia	1	1979

Method of work: On the basis of a questionnaire prepared by the secretariat, the Committee will assemble and regularly bring up to date a list of addresses of institutions working on solid fuels. A directory of institutions working in the coal industry was compiled in 1977; it was followed by a list of institutions concerned with the question of coal gasification and liquefaction and, in 1978, by a directory of institutions working on brown coals and lignite. Representatives of the secretariats of the intergovernmental organizations will keep the Committee informed of their respective organizations' activities concerning coal. The secretariat will prepare annually a list of documents published by ECE concerning energy. Bibliographies will be annexed to substantive reports. Under project component 4, the Yugoslav authorities will organize, in September 1979, a study tour of coal mines and institutes for representatives of the countries taking part in the work of the Committee.

05. - ENVIRONMENT

	<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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WORK AREA 05.1: PROSPECTIVE TRENDS AND PROBLEMS

05.1.1. Integration of environmental policies and socio-economic development planning

05.1.1.1. Seminar on integrated physical, socio-economic and environmental planning

Description: The Senior Advisers will consider concepts and procedures for comprehensive socio-economic planning and management that could be of value to ECE governments in implementing their environmental programmes.

Method of Work: In co-operation with the Committee on Housing, Building and Planning (and, in particular, its Working Party on Urban and Regional Planning and Development), the Senior Advisers will examine conceptual, institutional and methodological questions raised by integrated planning. A seminar on the subject will be held in June 1979 in Bergen (Norway).

3

1979

05.1.1.2. Co-operation with the Senior Economic Advisers to ECE Governments on the over-all economic perspective for the ECE region

Description: The project will focus on environmental issues of importance in the context of long-term economic planning and development in the ECE region.

Method of Work: With a view to contributing to the elaboration of over-all long-term economic prospects of the ECE region, the Senior Advisers will prepare notes and studies on significant environmental issues and, if necessary, organize ad hoc interdisciplinary meetings.

cont.

05.1.1.3. UNEP/ECE regional seminar on Alternative Patterns of Development and Lifestyles

Description: The aim of the project is to study problems and opportunities for long-term compatibility between economic and social development and improvement in environmental quality, and to explore the extent to which solutions may require changes in present development patterns and lifestyles.

Method of Work: As a contribution to the formulation of guidelines for the United Nations Third Development Decade, UNEP holds a series of seminars on "Alternative Patterns of Development and Lifestyles", jointly with the United Nations Regional Commissions. The Seminar for the ECE region will be held in Ljubljana (Yugoslavia) in late 1979 or early 1980.

2

1980

Estimated duration (in years)	Estimated termination year
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WORK AREA 05.2: CURRENT DEVELOPMENT AND PROSPECTS
IN ENVIRONMENTAL POLICIES

05.2.1. Environmental policies and strategies in
ECE countries

05.2.1.1. Exchange of information and views on the
basis of national monographs

Description: The aim of this project is to (i) keep the Senior Advisers informed about environmental policy development in the ECE region; (ii) permit them to select priority issues for in-depth discussion at their annual session; and (iii) serve as a basis for identification of new projects.

Method of Work: At their eighth session, the Senior Advisers will consider a proposal to prepare future surveys of environmental strategies and policies as a regional contribution to the comprehensive "State of the Environment" reports by the United Nations Environment Programme.

cont.

WORK AREA 05.3: ENVIRONMENTAL POLICY AND
MANAGEMENT ISSUES

05.3.1. Environmental impact assessment

05.3.1.1. Study of procedures and relevant experience relating to the activities of governments in developing the capabilities of their countries to predict adequately environmental consequences of economic activities and technological development (Environmental Impact Assessment)

Description: In order to assist ECE governments in developing policy instruments to ensure that full account is taken of environmental concerns in socio-economic planning and management, the Senior Advisers will undertake work on environmental impact assessment.

Method of Work: A seminar on practical experience in environmental impact assessment will be held in Villach (Austria) from 24 to 29 September 1979. The programme is based on selected case studies relating to projects in various sectors.

	<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
05.3.1.2. Economic assessment of environmental damage caused by air pollution		
<u>Description:</u> A common methodology for assessing environmental damage caused by air pollution will be developed.		
<u>Method of Work:</u> The activities are being carried out by an intergovernmental task force, headed by the USSR.	3	1980
05.3.2. <u>Inter-disciplinary planning and management problems</u>		
05.3.2.1. Selected environmental problems of tourism		
<u>Description:</u> The Senior Advisers will contribute to an inter-disciplinary examination of the tourist industry; attention will be given to the environmental impact of recent and foreseeable trends in the physical location of related activities and facilities, in particular in coastal areas. The purpose of the project is to develop knowledge and information that would permit member governments to consider harmonization of policies in the long-term interest of tourism development in the region.		
<u>Method of Work:</u> In co-operation with the Committee on Housing, Building and Planning, the Senior Advisers will focus attention on land-use problems and criteria for tourism development. Information will continue to be collected on coastline surveys in member countries.	4	1980
05.3.2.2. Protection of flora and fauna and their habitats		
<u>Description:</u> The Senior Advisers will examine methods of protecting flora and fauna and their habitats giving due recognition to the potential economic importance of genetic resources.		
<u>Method of Work:</u> An <u>ad hoc</u> group of experts will prepare a draft programme of work for examination by the Senior Advisers at their eighth session.	1	1980
05.3.2.3. Treaties, conventions, agreements and international problems of large areas in the ECE region		
<u>Description:</u> (i) The Senior Advisers will keep themselves informed of progress in the implementation of treaties, conventions, agreements and international programmes concerning environmental problems of large areas in the ECE region; (ii) they will continue to promote international co-operation on environmental problems concerning large areas in the ECE region.		

Estimated duration (in years)	Estimated termination year
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Method of Work: The secretariat will undertake to submit to the Senior Advisers appropriate reports concerning progress on subject (i) above. (ii) The secretariat will also inform the Senior Advisers of possible future co-operation regarding implementation of projects on large areas.

cont.

WORK AREA 05.4: RESOURCES AND WASTE PROBLEMS

05.4.1. Natural resources management in terms of ecological considerations

05.4.1.1. Recycling, re-use and recovery of municipal and industrial solid wastes

Description: The Senior Advisers will examine the policies and strategies which could be applied to encourage the effective recycling, re-use and recovery of municipal and industrial solid wastes.

Method of Work: Draft terms of reference and a programme of work have been prepared for a task force. It will examine, among others, present recovery practices taking into account the relationship of this project to low- and non-waste technology (project 05.4.1.2.).

4

1980

05.4.1.2. Low- and non-waste technology

Description: With the support of UNEP, the Senior Advisers will (a) compile a compendium on low- and non-waste technologies in the ECE region; and (b) promote the development of methodologies for comparison and evaluation of various technologies. The results would also be made available, through UNEP, to developing countries.

Method of Work: For the compilation of the compendium, national focal points have been designated and a second meeting of representatives will be convened in November 1979. Sub-project B above will be carried out by a task force.

4

1982

05.4.1.3. Control of toxic chemicals and toxic wastes

Description: Work will continue with regard to policy measures for handling and controlling toxic chemicals and toxic wastes.

Method of Work: Studies on various aspects of the control of toxic wastes and toxic chemicals, including regional support to global United Nations programmes, will be prepared. A first draft of a "Survey of national and international legislation, administrative measures and experience relating to the control of toxic substances with particular emphasis on toxic wastes" will be submitted to the Senior Advisers at their eighth session.

5

1981

Estimated duration (in years)	Estimated termination year
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05.4.2. Environmental problems related to energy

05.4.2.1. Environment and energy

Description: The Senior Advisers will co-operate in the over-all ECE programme on "General Energy Problems" carried out under the auspices of the Commission.

Method of Work: In the light of the decisions of the Commission at its thirty-third session, the Senior Advisers will consider appropriate contributions to that programme, in particular concerning environmental aspects. cont.

WORK AREA 05.5: SELECTED PROBLEMS OF POLLUTION

05.5.1. Air pollution problems 1/

05.5.1.1. Implementation, through international co-operation, of an extensive programme for the monitoring and evaluation of the long-range transport of air pollutants, starting with sulphur dioxide

Description: The main objective for the co-operative programme is to provide governments with information on the deposition and concentration of air pollutants, as well as on the quantity and significance of long-range transmission of pollutants and fluxes across boundaries. Information on the relative importance of local and distant sources resulting from such a programme will guide national authorities in setting appropriate local and regional permissible emission levels, taking into account the international implications of these levels. The information on the deposition and concentration of air pollutants will be a basis for abatement strategies in the regions affected.

Method of Work: The programme is being carried out under the auspices of the ECE and forms part of the Global Environmental Monitoring System of UNEP. In co-operation with WHO, the programme is supervised by a Steering Body made up of representatives from participating countries, which is responsible for all matters related to the effective implementation of the programme and reports annually to the Senior Advisers through its Working Party. The Senior Advisers requested the Working Party to invite the Steering Body to prepare proposals for continuation of the programme beyond 1980, for consideration at the eighth session.

4

1980

1/ This section of the programme will be reconsidered by the Working Party on Air Pollution Problems in May 1979.

Estimated duration (in years)	Estimated termination year
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- 05.5.1.2. Review and analysis of the existing situation and prospects with regard to the prevention of air pollution

Description: This is a continuing project aimed at keeping the Working Party informed of air pollution policy development in the ECE region and major trends in air pollution control activities, to achieve better understanding of problems and policies to enable priority issues to be selected for Working Party activities and to help member countries to use the experience of other ECE countries in air pollution control. The project will promote, when appropriate, the development of policy recommendations to control air pollution.

Method of Work: Each year, member governments will prepare statements, according to agreed guidelines. The statements will be circulated at the annual sessions of the Working Party in the original language. After the session, they will be issued as a document.

cont.

- 05.5.1.3. Co-operation with the European Regional Office of the World Health Organization (WHO), on the preparation of a manual of air pollutants from industrial sources

Description: Under the auspices of WHO/EURO and the ECE Working Party on Air Pollution Problems, a manual is being prepared which will cover the following pollutants: particulates, odours, SO₂ and sulphates, NO_x, heavy metals, fluorides, hydrocarbons, oxydants and chlorines.

Method of Work: The first draft of the manual will be elaborated by the Association of Engineers of the Federal Republic of Germany. The draft will be reviewed by WHO experts and members of the Working Party on Air Pollution Problems. The comments and amendments will serve for the elaboration of a final version of the manual.

3

1979

- 05.5.1.4. Organization of a seminar on air pollution problems from the cement industry

Description: The aim of this seminar is to examine recent achievements in air pollution control in the cement industry, and to provide a background for future elaboration of guidelines for the control of emissions.

Method of Work: A seminar will be organized in close co-operation with the Working Party on the Building Industry of the Committee on Housing, Building and Planning. The detailed programme of the seminar will be elaborated at a preparatory meeting.

5

1981

Estimated duration (in years)	Estimated termination year
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- 05.5.1.5. Development of guidelines for the control of emissions from the non-ferrous metallurgical industries

Description: The main aim of this project is to prepare guidelines for the abatement of pollutants emitted by the non-ferrous metallurgical industry, based on the experience of most advanced technology as well as on the results of experience with modernization of older smelters.

Method of work: A task force has been established with the Federal Republic of Germany as lead country. Drafts of guidelines for the following processes are being prepared: primary aluminium, secondary aluminium, primary and secondary lead smelters, primary copper smelters, secondary copper smelters, zinc concentrate preparation, zinc smelting. The final version of the guidelines is expected to be available by the end of 1979.

5

1979

- 05.5.1.6. Development of guidelines for the control of emissions from the inorganic chemical industry

Description: As a follow-up to the Seminar on Air Pollution Problems of the Inorganic Chemical Industry, the Working Party will develop guidelines for the control of emissions from the inorganic chemical industry. Particular attention will be given to the inorganic fertilizers, soda, chlorins and inorganic pigment industries.

Method of work: A task force has been established under the leadership of the Netherlands to carry out the work.

3

1980

- 05.5.1.7. Organization of a third seminar on the desulphurization of fuels and combustion gases

Description: A third seminar on the desulphurization of fuels and combustion gases will be held in Salzburg (Austria) in Autumn 1980.

Method of work: Co-operation between the Working Party and the Committee on Electric Power will be sought in order to prepare for the seminar.

3

1981

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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05.5.2. Problems of odours

05.5.2.1. Study on the problem of odours

Description: The aim of this project is to elaborate a basic report on the problem of odours, which will include an inventory of problems arising in countries taking part in the task force (e.g. definitions, measurements, control techniques, costs, etc.)

Method of work: A task force of experts from a number of ECE countries, with Poland as lead country, has been established to carry out the project.

4

1980

05.5.3. Problems of noise

05.5.3.1. Study of the problems of noise

Description: The Senior Advisers will study the problem of community noise, with the goal of assessing the present status of knowledge and of recommending methods for the prevention and abatement of such noise.

Method of work: A task force, with the United States as lead country, has developed a draft report on this subject. A seminar will be held in 1981.

5

1981

WORK AREA 06.6: STATISTICS, INFORMATION AND NORMS

06.6.1. Environmental statistics

06.6.1.1. System of environmental statistics

Description: The Senior Advisers, together with the Conference of European Statisticians will develop a system of environmental statistics through (a) elaboration of concepts, definitions and classifications; (b) study of statistical methodology; and (c) consideration of statistical requirements for environmental policies.

Method of work: A jointly sponsored seminar on methodological questions relating to the collection and compilation of environmental statistics will be convened in 1979 or 1980.

cont.

06.6.1.2. Indicators for the evaluation of the quality of the environment

Description: The Senior Advisers will study the concepts and practical applications of indicators of environmental quality, in order to develop a system of such indicators.

Method of Work: The activities will be carried out by a task force, with Yugoslavia as the lead country.

4

1980

06. - ELECTRIC POWER

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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WORK AREA 06.1: MEDIUM-TERM AND LONG-TERM PROSPECTS

06.1.1. Medium-term and long term prospects for the electric power industry in the ECE region

Description: The Committee will examine once every three years the medium-term and long-term prospects of the electric power industry in the context of national and regional energy economies. It will study major emerging problems and trends affecting demand and supply in electricity, and analyse and compare related policies with a view to organizing international co-operation among ECE countries.

Method of work: The work will be carried out by the Group of Experts on Problems of Planning and Operating Large Power Systems, in co-operation with the Committee's other groups of experts. An ad hoc meeting of experts will be convened by the secretariat on 31 May and 1 June 1979 to consider the possibility of holding a seminar on the medium-term and long-term prospects for the electric power industry.

cont.

06.1.2: Criteria for co-ordinating the design and planning of large power systems in the light of interconnexion requirements

Description: This project aims at identifying and comparing the basic methods and criteria used in this field.

Method of work: A report prepared by the government rapporteurs from Poland, on the basis of information supplied by the ECE countries and by CMEA, UCPTÉ, NORDEL, and the Central Dispatching Office of the Unified Power Systems (Prague) was submitted to the Group of Experts on Problems of Planning and Operating Large Power Systems at its 1978 session. This report will be issued for general distribution.

1

1979

0.6.1.3. Comparative analysis of methods used in forecasting the demand for supply capacity and electric power in rural areas

Description: The exchange of information and views to be undertaken within the framework of this project aims at identifying the best methods used in such analysis, bearing in mind the present and future conditions of development in rural areas.

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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Method of work: The project will be implemented by the Group of Experts on Distribution and Rural Electrification. A report will be prepared by the government rapporteurs from Poland on the basis of information supplied by the ECE countries

2	1979
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06.1.5. Co-operation with the Senior Economic Advisers to ECE Governments on the Overall Economic Perspective for the ECE region up to 1990

Description: In accordance with the provisions of Commission decision G (XXXII), the Committee will consider and comment on the Overall Economic Perspective for the ECE region prepared by the Senior Economic Advisers and draw their attention to the results of its own work in this field.

Method of work: The secretariat will be responsible for organizing continuing liaison between the Committee on Electric Power and the Senior Economic Advisers in their work on the economic perspective.

cont.

06.1.6. Investment policies in the electric power industry

Description: The Committee will organize an exchange of views on problems faced by Governments in the field of investment in the electric power industry and related policy alternatives, taking new economic conditions into account.

Method of work: The secretariat, after consulting Governments, will initially deal with selected aspects of this subject in the study which it is to prepare on the medium-term and long-term prospects for the electric power industry in the ECE region.

3	1980
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WORK AREA 06.2: CURRENT DEVELOPMENTS

06.2.1. Review of the electric power situation in the ECE region

Description: The Committee will undertake periodic studies on various aspects of the electric power situation in the ECE region.

Method of work: The secretariat will collect the requisite information from Governments and publish it in the periodic reports referred to under 06.2.1 and 06.2.1.3. In co-operation with France, it will revise and bring up to date the questionnaire used for the preparation of the triennial review.

cont.

	<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
06.2.1.1: Annual review of the electric power situation in the ECE region		
06.2.1.2: Triennial review of the electric power situation in the ECE region and its prospects		
06.2.1.3: Review of the state of rural electrification in the ECE region		
<u>Description:</u> The Group of Experts will undertake periodic studies on various aspects of the electric power situation in the ECE region.		
<u>Method of work:</u> The secretariat will collect the requisite information from Governments and publish it in the periodic reports referred to under 06.2.1.3.1 and 06.2.1.3.2.		
	cont.	
06.2.1.3.1. Quadrennial review of the state of rural electrification in the ECE region		
06.2.1.3.2. Biennial review of the state of rural electrification in the ECE region		
06.2.2. <u>Examination of opportunities for industrial co-operation in electric power production</u>		
<u>Description:</u> The Committee will examine the possibilities of promoting industrial co-operation in its sphere of activity.		
<u>Method of work:</u> The secretariat will keep the Committee informed of the relevant work of the other Principal Subsidiary Bodies concerned, and in particular the Committee on the Development of Trade, and co-operate with them as appropriate.		
	2	1979
06.2.3. <u>Selected statistical problems</u>		
<u>Description:</u> The Committee will, at its annual sessions, examine questions relating to the content and presentation of the periodic bulletins of electric power statistics, as well as the definitions and the units employed.		
<u>Method of work:</u> This project will be implemented by the Group of Experts on Electric Power Stations as indicated under each project component below.		
	5	1983

	<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
0.6.2.3.1. Method of accounting to be used, in global energy balances, for primary energy converted directly into electric power		
<u>Method of work:</u> The secretariat will prepare for the next session a document on the replies received in connexion with document EP/GE.2/R.41.	1	1979
06.2.4. <u>Preparation of a terminology suited to the needs of the Committee on Electric Power</u>		
<u>Description:</u> The Committee will prepare a terminology in English, French and Russian containing the most important terms used in the field of electric power production and transmission, including terms used in electric power statistics.		
<u>Method of work:</u> The terminology will be prepared by the secretariat on the basis of the terminologies published by the following international organizations: CMEA, IEC, UCPTÉ, UNIPEDE and WEC.	2	1980
06.2.5. <u>Problems raised by international standardization in the field of electric power</u>		
<u>Description:</u> The Committee and its subsidiary bodies will, at their sessions, examine subjects for which international standards should be elaborated.		
<u>Method of work:</u> The subjects selected will be transmitted to the International Electrotechnical Commission (IEC) through the Meeting of Government Officials Responsible for Standardization Policies.	cont.	
<u>WORK AREA 06.3: SELECTED TECHNOLOGICAL AND ECONOMIC PROBLEMS</u>		
06.3.1. <u>Selected problems of thermal power stations</u>		
<u>Description:</u> The purpose of this project is to promote technology transfers through exchanges of information and experience on selected problems of thermal power stations.		
<u>Method of work:</u> The project will be implemented by the Group of Experts on Electric Power Stations as indicated under each project component below:	5	1983

	Estimated duration (in years)	Estimated termination year
06.3.1.1 (a): Experience gained in the operation of units having a rated capacity of 200 MW or above at thermal power stations		
<u>Method of work:</u> A report will be prepared by the government rapporteurs from Poland on the basis of information transmitted by ECE countries, in co-operation with the government rapporteurs from the Federal Republic of Germany and with UNIPEDE and UCPTÉ.	3	1981
06.3.1.1 (b): Experience gained in the operation of units having a rated capacity of 200 MW or above at nuclear power stations		
<u>Method of work:</u> A report will be prepared by government rapporteurs from the Federal Republic of Germany on the basis of information transmitted by ECE countries, in co-operation with the government rapporteurs from Poland and with IAEA, UNIPEDE and UCPTÉ. The reference year for data will be 1978.	2	1980
06.3.1.1 (c): Problems concerning the design of high-capacity conventional and nuclear thermal power stations in seismic areas		
<u>Method of work:</u> A report will be prepared by government rapporteurs from the USSR, in co-operation with government rapporteurs from Czechoslovakia, on the basis of the experience of these two countries. These reports will serve as a model for the preparation of general information that will be useful for the compilation of a consolidated report.	3	1981
06.3.1.2: Problems concerning the design, production and operation of high-capacity thermal power units which use different types of fuel, are highly manoeuvrable and can be used to cover the half-peak of the load curve		
<u>Method of work:</u> A report will be prepared by the government rapporteurs from the USSR on the basis of information transmitted by ECE countries.	4	1982
06.3.1.3: Principles adopted in different countries for the definition of operational data in electric power and heat production		
<u>Method of work:</u> A report will be prepared by the government rapporteurs from Romania on the basis of information transmitted by ECE countries.	3	1981

	<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
06.3.1.4: Recommended methods for improving the availability of large units at thermal power stations		
<u>Method of work:</u> A report will be prepared by government rapporteurs from Belgium on the basis of information transmitted by ECE countries.	2	1979
06.3.1.5: Problems concerning the design, equipment and operation of installations for the extraction and removal of ash on a dry basis at thermal power stations using solid fuel		
<u>Method of work:</u> A consolidated report will be prepared by the government rapporteurs from Czechoslovakia on the basis of country reports transmitted by Czechoslovakia, the German Democratic Republic, the USSR and Yugoslavia. A symposium on the extraction, removal and use of ash from coal-fired thermal power stations will be held in Poland in 1980.	2	1980
06.3.2: <u>Symposium on Prospects for the Use of Hydroelectric Schemes in the light of the New Energy Conditions and the Problems resulting therefrom</u>		
<u>Description:</u> The purpose of the project is to promote technology transfers through exchanges of information and experience on selected problems of hydroelectric power stations.		
<u>Method of work:</u> The project will be implemented by the Group of Experts on Electric Power Stations. A Symposium on the subject will be held in Greece from 15 to 18 October 1979.	3	1980
06.3.2.1. Influence of the dynamic characteristics of pumping stations on the functioning of electric systems		
<u>Description:</u> The purpose of this project is to study the possibility of assessing the influence of the dynamic characteristics of pumping stations on the functioning of an electric system.		
<u>Method of work:</u> A national rapporteur from Italy will develop the subject, taking account of the technological and practical considerations deemed necessary.		

	<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
<p>06.3.3. <u>Problems relating to nuclear power stations, including breeder reactors (in co-operation with IAEA)</u></p> <p><u>Description:</u> The purpose of this project is to develop an exchange of experience and views on nuclear power station technology and related economic, operational and other problems.</p> <p><u>Method of work:</u> The project will be implemented by the Group of Experts on Electric Power Stations, as indicated under each project component below.</p>	3	1980
<p>06.3.3.2. Technical and economic problems involved in integrating large-capacity power stations into electric power systems - Programme and method of work</p> <p><u>Method of work:</u> This project will be implemented by an informal meeting of rapporteurs from Belgium, Hungary, Turkey and possibly Czechoslovakia, France, the Federal Republic of Germany and Switzerland. Co-operation will be established with the Group of Experts on Problems of Planning and Operating Large Power Systems. The secretariat will co-operate with IAEA and other international organizations in this matter.</p>		
<p>06.3.4. <u>Selected problems of distribution of electric power in rural areas</u></p> <p><u>Description:</u> The purpose of this project is to promote technology transfers through an exchange of information and experience on selected problems of electricity distribution in rural areas.</p> <p><u>Method of work:</u> The project will be implemented by the Group of Experts on Distribution and Rural Electrification as indicated under each project component below.</p>	4	1982
<p>06.3.4.1. Increased use of electricity in the rural sector and its effect on the development of distribution networks</p> <p><u>Method of work:</u> A report will be prepared jointly by the government rapporteurs from Poland and the USSR on the basis of information transmitted by the ECE countries.</p>	2	1979

	Estimated duration (in years)	Estimated termination year
06.3.4.2: Distribution by underground and overhead cable networks in rural areas		
<u>Method of work:</u> A report will be prepared jointly by the government rapporteurs from Hungary and the USSR on the basis of information transmitted by the ECE countries.	2	1980
06.3.5: <u>Study of data-processing questions from the standpoint of rural electrification, having regard to the possibilities afforded by the use of computers and modern management methods</u>		
06.3.5.1. Modern remote control systems in existence or which might be introduced in the near future in rural distribution networks. In particular, examination of systems designed on the basis of use of the radio wave spectra already used by plant maintenance teams, Economic effects of their use		
<u>Description:</u> The purpose of this project is to promote, through exchanges of information and experience, the development of technical progress in the operation of rural distribution networks.		
<u>Method of work:</u> A report will be prepared by the government rapporteurs from Spain on the basis of their national experience. The report will then be considered by the Group of Experts on Distribution and Rural Electrification so that it can be supplemented by the experience of several countries of the ECE region.	4	1982
06.3.6. <u>Possibilities of using residual heat from conventional and nuclear thermal power stations in agriculture and in aquaculture</u>		
06.3.6.1. Combined production of electricity and heat in a conventional thermal power station fired by peat for the supply of heat to horticultural enterprises		
<u>Method of work:</u> The project will be implemented by the government experts from Ireland and a report on the subject will be submitted to the Group of Experts on Distribution and Rural Electrification for consideration at its twenty-second session.	2	1980

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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06.3.7. Possible uses of heat pumps in rural activities

Method of work: A report will be prepared jointly by the government rapporteurs from the Federal Republic of Germany and Switzerland. (This project may be expanded on the basis of information transmitted by countries possessing relevant experience.)

4

1982

06.3.8. Electric power supplies for island regions and for areas that are isolated or far from the national power system of the country in question

Description: The particular purpose of this project is to facilitate and accelerate technology transfers in this field from the more experienced countries to the island European countries, and in particular to those which are developing from the economic point of view.

Method of work: The project will be implemented by the Group of Experts on Electric Power Stations. A consolidated report will be prepared by government rapporteurs from Greece on the basis of information transmitted by ECE countries. A seminar might be held in the near future.

WORK AREA 06.4: INTERCONNECTION OF ELECTRIC POWER TRANSMISSION SYSTEMS

Description: The Committee will elaborate economic criteria and methods for determining the choice of solutions to problems arising in the interconnection of electric power transmission systems in Europe.

Method of work: Documents EP/GE.2/R.36 and EP/GE.2/R.32 will be taken into account in the reports prepared by the government rapporteurs on the basis of information transmitted by member countries to the secretariat.

5

1983

06.4.1. Distribution of the questionnaire.
Study of replies

Description: The Group of Experts will study the replies to the questionnaire to be circulated by the secretariat.

Method of work: At its 1978 session, the Group of Experts on Problems of Planning and Operating Large Power Systems approved the final form of the questionnaire and considered problems relating to the organization of work, on the basis of document EP/GE.2/R.36.

1

1979

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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06.4.2. Studies on the optimum structure of the European system according to the method summarized in document EP/GE.2/R.36

Description: The purpose of the project is to utilize the results of the preceding project (06.4.1) in studying the optimum structures of the system.

Method of work: To be determined by the Group of Experts at its 1979 meeting.

06.4.3. Consideration of possibilities for the development of transfers of electric power in Central Europe (bilateral and trilateral reports are included)

Description: The purpose of this project is to promote the international interconnexion of electric power systems in this area of Europe.

Method of work: The secretariat will arrange for information to be transmitted regularly to the Group of Experts, particularly through contacts with CMEA and UCPTE.

1

1979

06.4.4. Economic and technical problems involved in the interconnexion of the electric power transmission systems of the countries of eastern and western Europe by means of very long high-voltage transmission lines

Description: The purpose of this project is to explore the possibilities of interconnecting the electric power transmission systems of the countries of eastern and western Europe by means of very long high-voltage transmission lines.

Method of work: The reports prepared on this subject by the government rapporteurs from the USSR and other interested countries and by international organizations will be submitted to the Group of Experts on Problems of Planning and Operating Large Power Systems.

3

1982

06.4.5. Economic and technical problems involved in the interconnexion of the electric power transmission systems of the Balkan countries

Description: The purpose of this project is to facilitate the interconnexion of the electric power transmission systems of the Balkan countries.

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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Method of work: The Committee will be kept informed of the progress of work on the matter and, in particular, of the results of the sessions of the Co-ordinating Committee set up by the Governments of Bulgaria, Greece, Romania, Turkey and Yugoslavia to deal with the problems arising in the development of interconnexions among these countries. The Group of Experts on Problems of Planning and Operating Large Power Systems and the secretariat will be available to assist the Co-ordinating Committee in its work.

2

1980

06.4.6. Reliability criteria for the design and testing of electric power production and transmission systems with reference to the analysis of reserve capacity problems

Description: The purpose of this project is to study the way in which reserve capacity influences the reliability of an electric power production system.

Method of work: The national rapporteurs from the Netherlands and Turkey will develop this subject, taking account of the technological and practical considerations deemed necessary.

2

1981

06.4.7. Problems connected with the management of the operating régimes of energy systems

Description: The purpose of this project is to elaborate methods which will make it possible, within the framework of the connexion of power systems, to resolve such important problems as dispatching, remote control, automation, protection, equipment, systems stability etc.

Method of work: National rapporteurs from the Byelorussian SSR will prepare a report in which they will indicate the main trends of the work. These trends are to be discussed by the Group of Experts in 1980.

06.4.8. Preparation of a map of high-voltage electric power networks

Description: The purpose of this map is to facilitate bilateral and multilateral negotiations between ECE Governments on the interconnexion of their networks.

Method of work: The map will be prepared by the secretariat in co-operation with UNIPEDDE, in accordance with the decision taken by the Group of Experts on Problems of Planning and Operating Large Power Systems. It is envisaged that the map will be subject to revision every five years.

cont.

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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WORK AREA 06.5: PROBLEMS OF IMPROVING EFFICIENCY

06.5.1. Rationalization of consumer use of electricity

Description: The purpose of this project is to promote, through exchanges of information and experience, increased economy and efficiency in the use of electric power, in particular in areas of low load density.

Method of work: The project will be implemented by the Group of Experts on Distribution and Rural Electrification. On the basis of information transmitted by the countries concerned, the government rapporteurs from Hungary and Romania will prepare reports for project components 06.5.1.2 and 06.5.1.1 respectively.

4	1982
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06.5.1.1. The effect of measures for rationalizing energy use on the development of electricity consumption in rural areas

Method of work: A report will be prepared by the government rapporteurs from Romania on the basis of information transmitted by the ECE countries.

4	1982
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06.5.1.2. Use of standard 20 kV networks to supply low-voltage electric power to rural areas where individual dwellings are too widely dispersed

Method of work: A report will be prepared by the government rapporteurs from Hungary on the basis of their national experience.

4	1982
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06.5.1.3. The rational use of electricity on selected farms and in low-voltage rural distribution networks

4	1982
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06.5.1.4. Measures adopted to reduce electric power losses in distribution networks, and the results obtained

Method of work: A report will be prepared by the government rapporteurs from Romania on the basis of information transmitted by the ECE countries.

4	1981
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06.5.2. Measures designed to save fuel in heat and electric power production

Description: The purpose of the project is to identify the possibilities and limitations of measures intended to save fossil fuels in electric-power and heat production, as well as at the consumer level.

	<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
<u>Method of work:</u> The project will be implemented by the Group of Experts on Electric Power Stations and other subsidiary bodies of the Committee in the manner indicated under each project component below.	3	1980
06.5.2.1. Economic conditions and technological procedures for measures designed to save fuel in electric-power and heat production: future prospects		
<u>Method of work:</u> A report will be prepared by government rapporteurs from Romania on the basis of information transmitted by Governments.	3	1981
06.5.2.2. Possibilities offered by the use of combined heat/power cycles to improve the economic performance of gas turbines. Recommendations to be addressed to manufacturers		
<u>Method of work:</u> Government experts from the Federal Republic of Germany are to prepare a report on the basis of information transmitted by ECE countries.	3	1981
06.5.3. <u>Evaluation of Europe's hydroelectric potential</u>		
<u>Description:</u> The purpose of the project is to promote the use of the hydroelectric potential now becoming economically attractive because of increased energy prices.		
<u>Method of work:</u> The project will be implemented by the Group of Experts on Electric Power Stations, where necessary in co-operation with the Committee on Water Problems. A consolidated report will be prepared by Government rapporteurs from Spain on the basis of information transmitted by ECE countries.	2	1980
06.5.4: <u>Utilization of geothermal energy for electric-power production and space heating</u>		
<u>Description:</u> The project will consist in reviewing geothermal resources and the techniques used for the production of electricity and of heat of geothermal origin.		
<u>Method of work:</u> A report will be prepared by Government rapporteurs from Italy. A seminar will be organized on this subject.		

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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06.5.5. Impact of the introduction of summer-time on
the more economical use of electric power

Description: The purpose of this project is to promote greater savings in the use of electric power through exchanges of data, information and experience.

Method of work: The project will be implemented by the Group of Experts on Problems of Planning and Operating Large Power Systems. A report will be prepared by the Government rapporteurs from Poland on the basis of information provided by Governments.

2	1980
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06.5.6. Methods used to evaluate and measure losses
in electric power production and distribution
systems and ways of reducing such losses

Description: The purpose of this project is to determine the amount of losses in the networks and to study economic means of reducing them.

Method of work: A questionnaire will be prepared by the German Democratic Republic and submitted to the Group of Experts at its next session. A report will be drawn up by government rapporteurs from the German Democratic Republic on the basis, inter alia, of information communicated by Governments.

2	1980
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06.5.7. Utilization of land as a factor of production
in electric power production and transmission
systems - past trends and future prospects

Description: The purpose of the project is to determine the extent of the utilization of land in electric systems and its development.

Method of work: A government rapporteur will prepare a questionnaire to be submitted to the Group of Experts at its next meeting.

2	1980
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WORK AREA 06.6: ENVIRONMENTAL PROBLEMS

06.6.1. Selected problems concerning the relationship
between electricity and the environment

Description: The Committee will undertake an exchange of views and experience on the technical and economic aspects of environmental problems relating to the production, transmission and distribution of electric power and means of solving them.

	Estimated duration (in years)	Estimated termination year
<p><u>Method of work:</u> The project will be implemented, where necessary in co-operation with the Senior Advisers to ECE Governments on Environmental Problems, by the Group of Experts on the Relationship between Electricity and the Environment, as indicated under each project component below.</p>	4	1982
<p>06.6.1.1. Effects of thermal discharges from electric power stations into watercourses and reservoirs, and regulations in force in various countries</p>		
<p><u>Method of work:</u> A report will be prepared by the government rapporteurs from the USSR on the basis of information transmitted by ECE Governments. The co-operation of the Committee on Water Problems will be enlisted.</p>	2	1979
<p>06.6.1.2. Effects of polluted water on the cooling systems of thermal power stations</p>		
<p><u>Method of work:</u> A report will be prepared by the government rapporteurs from Poland on the basis of information transmitted by ECE Governments.</p>	3	1980
<p>06.6.1.3. International comparison of standards concerned with methods of calculating pollution levels and measuring and monitoring pollution caused by electric power stations</p>		
<p><u>Method of work:</u> The secretariat will prepare a report on the basis of information transmitted by ECE Governments on this subject. It will take into account the work of the Meeting of Government Officials Responsible for Standardization Policies and the activities of other international organizations in this field, in particular the International Electrotechnical Commission.</p>	4	1982
<p>06.6.1.4. The contribution of electric power and its development to the improvement of the environment</p>		
<p><u>Method of work:</u> An information booklet intended for the general public will be prepared by the government rapporteurs from Belgium, France and Poland on the basis of information transmitted by ECE Governments.</p>	2	1979

	Estimated duration (in years)	Estimated termination year
06.6.1.5. Environmental aspects of the closed-circuit cooling system of thermal power stations		
<u>Method of work:</u> A report will be prepared by the government rapporteurs from the Federal Republic of Germany on the basis of information transmitted by ECE Governments.	2	1980
06.6.1.6. Economic and ecological comparisons between different space heating systems using different sources of energy		
<u>Method of work:</u> The Group of Experts on the Relationship between Electricity and the Environment will begin this study by drafting a report on electric heating. When the other ECE subsidiary bodies involved have provided similar studies for other energy sources, an effort will be made to consolidate the material.		
06.6.1.7. Liquid discharges from thermal power stations (excluding thermal discharges): chemical effluents and cooling-tower blowdown		
<u>Method of work:</u> A report will be prepared by government rapporteurs from the Federal Republic of Germany on the basis of information transmitted by ECE Governments.	2	1980
06.6.1.8. Noise emission by thermal power stations		
<u>Method of work:</u> A report will be prepared by the government rapporteurs from the United Kingdom on the basis of information transmitted by ECE Governments.	2	1980
06.6.1.9. The possibilities of using residual heat in the cooling water of electric power stations		
<u>Method of work:</u> A report will be prepared by the government rapporteurs from France on the basis of information transmitted by ECE Governments.	2	1980
06.6.1.10. Prospects of using non-polluting water treatment techniques in thermal power stations; technological and economic effectiveness		
<u>Method of work:</u> A report will be prepared by the Group of Experts on the Relationship between Electricity and the Environment on the basis of information transmitted by ECE Governments.	2	1980

	<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
06.6.1.11. Combustion of fuel oil with a high sulphur and vanadium content; technological solutions for the prevention of air pollution and the corrosion of heat exchangers		
<u>Method of work:</u> A report will be prepared by the government rapporteurs from Belgium on the basis of information transmitted by ECE Governments.	2	1980
06.6.2. <u>Integration of electricity production, transmission and distribution installations into the environment</u>		
<u>Description:</u> The purpose of the project is to promote exchanges of information and experience on problems concerning the integration of electric power installations into the environment and to give the public objective information about these problems.		
<u>Method of work:</u> Details are given below.	4	1980
06.6.2.1. Public information on the integration of electricity production, transmission and distribution installations into the environment		
<u>Method of work:</u> This project will be implemented by the Group of Experts on the Relationship between Electricity and the Environment in co-operation with the Senior Advisers to ECE Governments on Environmental Problems, especially in connexion with their project on evaluating impact on the environment.	2	1979
The following two public information booklets will be prepared:		
(a) Visual amenities of electric power stations (by government rapporteurs from Czechoslovakia, Finland and the United Kingdom)	2	1979
(b) Integration of nuclear power stations into the environment (by government rapporteurs from France, Spain and possibly one other country, in co-operation with IAEA)	2	1979
06.6.2.2. Integration of electricity distribution installations into the environment		
<u>Method of work:</u> A report prepared by the government rapporteurs from Finland on the basis of information communicated by countries will be submitted both to the Group of Experts on the Relationship between Electricity and the Environment and to the Group of Experts on Distribution and Rural Electrification.	2	1980

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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06.6.3. Limitations imposed by the nuisance-absorptive capacity of the environment on the development of the production, transmission and distribution of electric power

Description: The purpose of this project is to study the limits of the nuisance-absorptive capacity of the environment as a constraint on the development of the electric power industry.

Method of work: In the initial phase, the secretariat will assemble general information on the above-mentioned constraints, derived, in particular, from studies carried out by ECE subsidiary bodies and other international organizations, to be submitted to the Group of Experts at its 1979 session. A report could then be prepared by a group of national rapporteurs to be established by the Group of Experts at its next session.

3	1981
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06.6.4. Problems of land use and land-use planning posed by the establishment of large power stations and electric power transmission lines (ECE decision H (XXXIII))

Method of work: A report will be prepared by government rapporteurs from France on the basis of information transmitted by ECE Governments.

2	1980
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07. - GAS

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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WORK AREA 07.1: MEDIUM- AND LONG-TERM PROSPECTS

07.1.1. Natural gas markets, natural gas availabilities and import possibilities and the future role of gas in the energy requirements of the ECE region (in the period up to 2000)

Description: The Committee will periodically examine problems linked to natural gas markets, natural gas availabilities and import possibilities and the future role of gas in the energy requirements of the ECE region (in the period 1980-2000), in order to identify specific issues for intergovernmental co-operation. Quantitative data and estimates on various possibilities and on relative positions of gas versus other forms of energy in the overall energy balances will be studied in order to provide background information for formulating policy decisions for the future of the gas industry.

Method of work: Periodically, at 3-4 years intervals, symposia will be held on the subject. The Group of Experts on Gas Statistics and Forecasting Problems will, at its next session, consider "features which play a role in the supply and demand of gas", and elaborate, in time, a programme of work for the future symposium to be held on the subject.

cont.

07.1.2. Large-scale projects of common interest for natural gas import/export

Description: The Committee will examine problems relating to possible large-scale natural gas import/export projects of common interest.

Method of work: The method of work, depending on circumstances, will be decided upon by the Committee at its next session.

2

1981

07.1.3. Co-operation with the Senior Economic Advisers to ECE Governments on the Overall Economic Perspective for the ECE region

Description: The Committee will consider and comment upon the Overall Economic Perspective prepared by the Senior Economic Advisers to ECE Governments and will make available to them the results of its own relevant work.

Method of work: The secretariat will assist with the work in accordance with decision G (XXXII).

2

1980

Estimated duration (in years)	Estimated termination year
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WORK AREA 07.2: CURRENT DEVELOPMENTS AND PROSPECTS,
INCLUDING TRADE

07.2.1. Analysis of the gas situation and prospects for
natural gas markets in the ECE region

Description: At each annual session, the Committee will examine the gas situation in the ECE region, and its prospects. This exchange of views on annual (and, periodically, triennial) development of gas markets, factors affecting gas marketing, indigenous supplies, imports/exports, forecast of gas demand for five years ahead, and other points of interest, will enable Governments to share experience in managing their gas industries.

Method of work: The discussion will be based on comprehensive, annual or triennial statements by Governments, prepared along common lines and issued in advance of each session. Also a secretariat paper, based mainly on statistical data received from Governments, will be considered. Whenever necessary, in-depth discussions will be held on specific issues based on specialized papers prepared by government rapporteurs, with the help of the secretariat.

cont.

07.2.2. Developments and prospects for intra-
regional trade in gas

Description: The Committee, at its annual sessions, will consider problems relating to developments and prospects for intra-regional trade in gas in the ECE region, including trade opportunities in LPG, so as to promote such trade.

Method of work: The Committee will consider these problems in connexion with its analysis of the gas situation and gas markets.

cont.

WORK AREA 07.3: SELECTED ECONOMIC AND TECHNOLOGICAL
PROBLEMS

07.3.1. Economic and technical aspects of the use
of gas in various consumption sectors

Description: The Committee will examine economic and technical aspects of the use of gas in various consumption sectors in order to identify problems which require in-depth study and exchange of information and experience. Issues identified for detailed study are as follows:

	<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
(a) various uses of liquefied petroleum gases;		
(b) use of gas for electricity generation in thermal power plants.		

Method of work: The Group of Experts on the Use and Distribution of Gas will carry out studies on the use of gas in selected sectors. Regarding sub-topic (a), the Ad hoc Meeting on LPG will be convened in October 1979, with a view to defining the work envisaged in the field of LPG. The Ad hoc Meeting will consider the outcome of the Symposium held in Evian, as far as LPG be concerned, and also other work done in the field of LPG by the Group of Experts on the Use and Distribution of Gas, and work being carried out by other organizations, private and governmental, in this field. When the secretariat notifies member Governments of the Ad hoc Meeting, it should request that information be provided to the secretariat on the kind of work being carried out in their countries in the field of LP-Gas.

3 1982

Regarding sub-topic (b), the Group of Experts on the Use and Distribution of Gas will consider the information received in reply to the questionnaire drafted by the government rapporteurs from Czechoslovakia and France, circulated by the secretariat.

1 1980

07.3.2. The use of LNG installations for peak-shaving purposes and for serving remote areas

Description: The Committee will examine the use of LNG installations for peak-shaving purposes and for serving remote areas, with a view to exchanging experience and promoting a wider use of this technique. Special attention will be paid to technical and economic aspects of the use of LNG for peak-shaving purposes.

Method of work: The Group of Experts on the Transport and Storage of Gas will discuss the revised report on LNG installations for peak-shaving purposes, to be prepared by Mr. Dechamps (European Economic Community) which will be revised on the basis of new information received from countries and information available. A Seminar and Study Tour on LNG Peak-Shaving will be held in Washington (United States) from 5 to 9 March 1979.

3 1980

Estimated duration (in years)	Estimated termination year
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07.3.3. Revision of the Map of European Gas Transmission Networks and the International Map of Natural Gas Fields in Europe

Description: The Committee will proceed with the revision of: (a) the Map of European Gas Transmission Networks, and (b) the International Map of Natural Gas Fields in Europe.

Method of work: Regarding (a), the revision of the Map of European Gas Transmission Networks will be carried out with the help of the Government of Hungary on the basis of updated information supplied by ECE Governments. The Group of Experts on the Transport and Storage of Gas will examine and approve the revised Map before its final publication. The revision of the International Map of Natural Gas Fields in Europe, sub-topic (b), will take place in two years time. The Government of the Federal Republic of Germany will do the revision work on the basis of updated information, as at the end of December 1978, supplied by ECE Governments. The Explanatory Note will also be revised in due time.

2	1981
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07.3.4. Problems in management of international gas pipelines

Description: The Committee will study basic principles involved in despatching in international gas pipelines systems management.

Method of work: The draft questionnaire, prepared by experts from the USSR, in collaboration with experts from France and the United Kingdom will be sent to Governments for their comments and observations. The Group will discuss the questionnaire at its next session and will decide how to progress with the topic.

3	1980
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07.3.5. Development of underground gas storage facilities

Description: The Group of Experts on the Transport and Storage of Gas will study various aspects of underground storage of gas and related problems.

Method of work: The rapporteur on the topic from France will prepare two new papers on the problems of new aspects of underground storage of gas, entitled "Use of inert gas as cushion gas in underground storages in aquifers" and "underground gas storage capacity in the world". The reports will be prepared in collaboration with a small group of specialists and discussed by the Group at its next session. The Group will then decide how to progress with the study.

3	1980
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Estimated duration (in years)	Estimated termination year
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07.3.6. Harmonization of codes of good practices,
technical rules and regulations and standards
of gas equipment and appliances

Description: The Committee will consider possibilities of encouraging the harmonization of codes of good practices, technical rules and regulations and standards of gas equipment and appliances. The purpose of this work is to alleviate technical obstacles to international trade in gas equipment, appliances and to assist governments in their regulations work in the field of the gas industry through international co-operation.

Method of work: The International Gas Union and, if possible, Marcogaz, will report to the Committee once every two years on related work in this field carried out by other organizations.

cont.

07.3.7. Maintenance problems in gas transport systems

Description: The Committee will examine maintenance problems in gas transmission systems and exchange information and experience on maintenance practices and new techniques employed. Specific problems will be selected for detailed study. At present, the problem under consideration is "Technical and economic aspects of the internal lining of pipelines".

Method of work: The secretariat has sent a letter to governments, requesting their views on new problems in the maintenance of new pipeline systems to be studied by the Group. The proposals of governments will be discussed at the next session of the Group.

3

1982

07.3.8. Load factor of transport and distribution
systems

Description: The Committee will select problems for detailed study regarding load factor of transport and distribution systems. At present, the Group of Experts on the Use and Distribution of Gas studies "The determination and use of theoretical and actual capacities and load factor of distribution systems" and the Group of Experts on the Transport and Storage of Gas studies "Economic and technical prerequisites in the determining of the load factor of gas transport pipelines".

Estimated duration (in years)	Estimated termination year
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Method of work: At its next session, the Group will consider suggestions on further work on "The determination and use of theoretical and actual capacities, and load factors of distribution systems", that the representative of Hungary would formulate, by taking into account comments received from the IGU on GAS/GE.2/R.13, "Definitions of some concepts used in the gas industry". The Group of Experts on the Transport and Storage of Gas will discuss, at its next session, the revised consolidated paper on "Economic and technical prerequisites for the determining of the load factor of gas transport pipelines" prepared by a government rapporteur from the USSR containing more detailed information on the subject.

3	1979
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3	1980
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07.3.9. Selected research and development problems

Description: The Committee will select, for detailed examination, research and development problems in order to arrange exchange of information on relevant activities in the ECE countries.

Method of work: The secretariat will contact governments, asking them for their comments on GAS/AC.4/3, "Provisional Agenda for the Second Meeting of Directors of Research Institutes or Centres of the Gas Industry". Comments received will be brought to the attention of the Committee at its next session for decision on future work in this field.

07.3.9.1. Research problems in the field of use and distribution of gas

Description: Research and development problems in the field of use and distribution of gas will be reviewed with a view to encouraging an exchange of information and experience between member countries. At present, the Group of Experts on the Use and Distribution of Gas considers (a) possibility of using hydrogen in existing gas transport and distribution facilities in future; and, (b) problems of ensuring the compatibility of natural gases of different characteristics and from different sources.

Method of work: As regards project component (a), at its next session, the Group of Experts will consider: (i) Governments' contributions and, (ii) the outcome of the Symposium on the Gas Situation in the ECE Region around the Year 1990, in Evian, France, in October 1978, as far as hydrogen and/or different mixtures of manufactured gas-use possibilities in the future are concerned. As regards project component (b), at its next session the Group will exchange views on current and/or

	Estimated duration (in years)	Estimated termination year
expected problems of compatibility of various types of natural gases, as well as "all industrial gases". The communication to be received from the German Democratic Republic, as well as other pertinent contributions will be issued and considered.	3	1980
07.3.9.2. Research problems in the field of transport and storage of gas		
<u>Description:</u> Current technological developments and related R and D activities will be reviewed by the Committee on Gas so as to exchange experience, and promote co-operation in the field of transport. At present, the Group of Experts on the Transport and Storage of Gas considers the economic aspects of the transportation of cooled gas of a temperature of -50°C to -70°C by pipeline.		
<u>Method of work:</u> At its next session, the Group will discuss the information prepared by the expert from the USSR on "Technical and economic aspects of the transportation of cooled gas of a temperature of -50°C to -70°C by pipeline" and information which might be received from countries.	3	1980
07.3.9.3. Offshore technology and sea pipelines for the transport of gas		
<u>Description:</u> Current technological developments and related R and D projects will be reviewed by the Committee on Gas to exchange experience and promote co-operation in this field.		
<u>Method of work:</u> At the next session, the Group of Experts will consider new information received from countries. The Group will also discuss the draft programme of work prepared by the USSR delegation, in collaboration with the delegates of France, United Kingdom and other interested countries. The Preparatory Meeting will be held in November 1979 for the second Seminar on Offshore Technology and Problems relating to Sea Pipelines for the Transport of Gas.	3	1982
07.3.9.4. Geological and geophysical methods of prospecting for gas		
<u>Description:</u> The Committee will review methods of exploration for natural gas with a view to exchanging information and experience between member countries.		
<u>Method of work:</u> A Seminar on Exploration for Gas Fields in the ECE Region (Geology and Geophysics) will be held in Hannover, Federal Republic of Germany from 6 to 10 April 1981.	3	1981

Estimated duration (in years)	Estimated termination year
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07.3.10. Production and use of substitute natural gas

Description: The Committee will provide opportunities for an exchange of information and experience in the production and use of substitute natural gas, in order to follow developments in the field of solid and/or liquid fuel gasification and relevant installations constructed or put into operation for making SNG.

Method of work: A Symposium on Gasification and Liquefaction of Coal will be organized by the Coal Committee at Katowice (Poland) 23-27 April 1979, in which the Committee will participate.

3	1981
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07.3.11. Natural gas transport over long distances by pipelines of large diameter

Description: The Group of Experts on the Transport and Storage of Gas will study the economic and technical aspects of the transportation of huge amounts of gas over pipelines of large diameters for very long distances.

Method of work: At its next session, the Group will consider the information received from the USSR on the problem of natural gas transport over long distances by pipelines of large diameters and the questionnaire, prepared by the experts from this country.

3	1980
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07.3.12. Exploitation of natural gas resources

Description: The Committee will select problems for detailed study regarding the exploitation of natural gas resources. At present, the Group of Experts on Natural Gas Resources considers: (a) collection and publication of statistical data on the gas recovery factor; (b) collection and examination of statistical data on natural gas reserves. The Group will also consider a study entitled "Exploration for natural gas in offshore areas".

Method of work: Regarding project component (a), the government rapporteur designated from the USSR will draft a consolidated paper. The Group will collect statistical data on estimates of natural gas reserves and consider them at its annual sessions. Data on reserves in non-ECE countries that might be received will also be considered by the Group of Experts. On the topic "Exploration for natural gas in offshore areas", the Group of Experts will consider how to initiate the study.

2	1980
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cont.

Estimated duration (in years)	Estimated termination year
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WORK AREA 07.4: ENVIRONMENTAL PROBLEMS

07.4.1. The gas industry and environment

Description: The Committee will examine the relationship between the gas industry and environment, in order to draw the attention of Governments to the merits of gas as a tool to combat air pollution and improve the environment in general. Negative aspects of the gas industry from the environmental point of view, if any, will also be examined.

Method of work: An informal meeting between governmental experts of interested countries will probably be held in Bulgaria (dated and invitation to be confirmed).

3

1982

WORK AREA 07.5: EFFICIENCY AND CONSERVATION

07.5.1. Methods of determining the efficiency of the use of gas in various branches of industry

Description: The Committee will study and exchange information and experience regarding the efficiency and effectiveness problems in various uses of gas. At present, the Group of Experts on the Use and Distribution of Gas studies: (a) rational use of gas in various sectors of the economy, and relevant conservation ethics - methods of determining the efficiency of the use of gas in various branches of industry; (b) the effect of gas supply costs on the rational use of gas in the various sectors of the economy; (c) recuperation of heat in combustion products of industrial installations using natural gas including recuperative burners; (d) establishment of a priority list for natural gas consumption in various sectors of the economy so as to obtain maximum yield; (e) impact of the use of natural gas on the reduction of specific energy consumption in different sectors of the economy.

Method of work: As regards project component (a), following its "First Report on the Rational Use of Gas in the Various Sectors of the Economy: Methods of Determining the Efficiency of the Use of Gas", the Group of Experts, at its next session, will continue its work in this field and it will: (i) issue a list of the addresses of governmental organizations serving as information centres for advising clients on energy saving/rational uses, so as to enable these organizations to contact each other and exchange information between themselves in their fields of activity; (ii) consider a preliminary report drafted by the government rapporteur from the USSR, based on information to be provided by Governments on their energy saving and rational use campaigns. Information that might be received from governmental and non-governmental organizations would also be taken into account.

3

1979

	Estimated duration (in years)	Estimated termination <u>year</u>
Concerning project component (b), the Group will consider at its next session, a consolidated report drafted by the EEC Rapporteur on "The effect of gas supply cost on the rational use of gas in the various sectors of the economy", taking into account comments received or to be received by 1 September 1978. As regards project component (c), at its next session, the Group of Experts will consider a preliminary report on recuperation of heat in combustion products of industrial installations using natural gas, drafted by the government rapporteur from Romania, based on replies to the questionnaire circulated on the subject. Regarding project component (d), the Group of Experts will be informed of the outcome of the informal meeting held in Budapest (Hungary) in October 1978, and will decide how to progress further with the study. Regarding project component (e), a draft questionnaire, "Impact of the use of natural gas on the reduction of specific energy consumption in different sectors of the economy" will be prepared by the USSR.	2	1979
	3	1979
	2	1981
	2	1981

07.5.2. Exploitation of natural gas, stimulation and enhanced recovery techniques

Description: The Committee will study (i) relationship between the production technology and recovery factor in gas reservoirs, and (ii) stimulation and enhanced recovery techniques in natural gas production, and organize an exchange of information on relevant recent technologies, e.g., use of acidizing, hydraulic pressure, atomic explosions to improve porosity or to open cracks so as to stimulate gas flow from wells to increase gas recovery. This project also includes exploration and exploitation of natural gas in carbonate rocks to be studied by the Group of Experts on Natural Gas Resources. Also, the Committee will study and exchange information on problems related to the extent of associated gas waste in oil production operations.

Method of work: The Group of Experts will continue the study of the relationship between the production technology and recovery factor in gas reservoirs and will discuss, at its next session, a revised paper prepared by the government rapporteur from the USSR. At its fourth session, the Group will also consider the revised paper prepared by the government rapporteur from the USSR, entitled "Development of gas fields in carbonate rocks, estimation of reserves, methods of increasing the recovery factor".

3 1980

Estimated
duration
(in years)

Estimated
termination
year

WORK AREA 07.6: STATISTICS AND INFORMATION 1/

07.6.1. Bulletin of Gas Statistics

Description: The Committee, through the Group of Experts on Gas Statistics and Forecasting Problems and in co-operation with the Conference of European Statisticians where necessary, will examine the questions related to the contents of the Annual Bulletin of Gas Statistics and relevant data in the Annual Bulletin of General Energy Statistics, published regularly, as well as the definitions and units employed therein.

Method of work: The Group of Experts on Gas Statistics and Forecasting Problems will review and examine contents of the Annual Bulletin of Gas Statistics in order to assist the Conference of European Statisticians in collecting internationally-comparable statistical data.

cont.

07.6.2. Development and improvement of statistical information

Description: The Committee, together with the Conference of European Statisticians where necessary, will select problems for detailed examination in order to develop and improve international statistics in the field of the gas industry. At present, the Group of Experts on Gas Statistics and Forecasting Problems considers:

- (a) questions arising from the gradual transition to the international system of units (the SI Units) in many countries;
- (b) the international comparison of ratios within the gas industry;
- (c) harmonization of questionnaires (circulated by various international bodies in the field of gas statistics), especially definitions used and their presentation;
- (d) additional data to be collected on a regular basis for inclusion in the gas bulletins (survey of the additional data requirements in countries and by various international bodies);
- (e) technical problems related to "Overall balance sheets of energy" (co-operation possibilities with the other Principal Subsidiary Bodies of the ECE that deal with energy);
- (f) collection of data on underground gas storage and LNG peak-shaving facilities;
- (g) collection of data on gas transport mains classified according to their internal diameters. The Group of Experts will study the use of computers in forecasting in the short-, medium- and long-term.

1/ These projects will be reformulated, depending on the outcome of the relevant subsidiary body meetings to be held.

Estimated duration (in years)	Estimated termination year
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Method of work: The Group of Experts on Gas Statistics and Forecasting Problems will study the project components 07.6.2. (a), (b), (c), (d), (e), (f) and (g). In connexion with statistical information published periodically, and project components (c) and (d), the Group will consider at its next session, any comments and observations received from governments on the improved drafts and data requirements adopted at its seventeenth session (Annex I of GAS/GE.1/12) and proceed with the collection of statistical data accordingly for the year 1979, so as to enable the publication of the Annual Bulletin of Gas Statistics for Europe in 1980. Furthermore, in connexion with the project component (d), the Group of Experts will continue to consider suggestions received on splitting the consumption sector "Trade, communications, services and activities not specified above, including public lighting" into various sub-sectors, so as to follow closely gas consumption in tertiary sectors. The Group will also make an inquiry and survey on computer programmes for use in forecasting gas demand for short, medium and long term (i.e. daily, weekly and monthly gas demand forecast).

cont.

07.6.3. Information on investments in the gas industry including financing

Description: The Committee will study investments in the gas industry and their financing possibilities, with a view to exchanging information and also to identify the problem areas in financing investments requirements.

Method of work: The Committee will periodically collect data on investments and financing requirements of the gas industry. The secretariat will circulate a revised questionnaire for the collection of 1978 investments data. Mr. Gläser (Federal Republic of Germany), Chairman of the Ad hoc Meeting on Investments in the Gas Industry and their Financing Possibilities, will prepare a consolidated report using replies received from governments by 1 September 1979, which will be issued for consideration by the Committee at its next session.

cont.

08. - HOUSING, BUILDING AND PLANNING

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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WORKAREA 081: INTEGRATED SETTLEMENTS POLICIES
AND STRATEGIES

08.1.1. Current trends and policies in the field
of human settlements

Description: The Committee will, at each plenary session, exchange views on current trends and policies in the field of human settlements. These discussions enable Governments to draw on each other's experience in formulating and modifying their short- and medium-term policies.

Method of work: Every second year (even years), the discussion will be based on comprehensive country monographs prepared along common lines and circulated directly among Governments in advance of the session. In intermediate years, notes will be circulated, bringing the monographs up to date. The country material will be analysed and synthesized by the secretariat.

cont.

08.1.2. Long-term perspectives for human settlements
development in the ECE region

Description: The Committee will examine long-term perspectives for human settlements development in the ECE region with a view to establishing a frame of reference for its studies on long-term policies. The study will also provide a sectoral input to the envisaged further analysis of overall long-term economic prospects which is being carried out under the auspices of the Senior Economic Advisers to ECE Governments, in accordance with Commission decision G (XXXII).

Method of work: A study will be prepared by the secretariat on the basis of the results of the housing censuses carried out around 1970, several studies and seminar reports relating to long-term perspectives and forecasting in the field of planning, housing and construction and other relevant material. Progress reports on the study will be presented to the annual sessions of the Committee; a final report is expected to be ready for publication in 1981 or 1982.

Estimated
duration
(in years)

Estimated
termination
year

08.1.4. Land-use planning and policies for human settlements

Description: The Committee will exchange information and experience on land-use problems and policies with a view to improving tools and instruments at the disposal of Governments for ensuring an adequate supply and development of the land needed for settlement purposes. The Committee will further participate in studies on land-use problems undertaken in a comprehensive and multi-sectoral manner, in accordance with Commission decision H (XXXIII).

Method of work: On the basis of national monographs elaborated by interested countries, a number of topics were identified and subsequently discussed at a seminar, held in Sweden in June 1978. A synthesis of the seminar documentation and debate is being prepared by a general rapporteur for examination by the Committee, at its September 1979 session.

2

1979

08.1.6. Impact of energy considerations on human settlements policies

Description: The Committee will examine the impact of energy considerations on the planning, development and management of human settlements. The purpose of the project is to assist Governments in drawing up medium and long-term human settlements policies in which due account is taken of the economic, social, environmental and technical implications of energy problems and policies.

Method of work: Following a seminar in Canada in October 1977, in-depth discussions on energy and human settlements will be held at the Committee's annual sessions. Further work also includes the convening of an inter-secretariat meeting and national colloquia on energy and human settlements. An ad hoc Group of experts assists the Committee in monitoring this project.

cont.

08.1.7. Improvement of housing and its surroundings

Description: The Committee will examine methods of assessing the quality of existing built-up areas and methods of modernizing, improving and renewing cities and individual buildings. These studies will assist Governments in formulating their policies in an area of increasing concern in all ECE countries.

Estimated duration (in years)	Estimated termination year
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Method of work: Following two ad hoc meetings, the preparation of country monographs and an analytical report based thereon, a seminar will be held in the Netherlands in October 1979. A general rapporteur will prepare a synthesis report, based on the seminar documentation and debates.

3

1980

08.1.8. Special human settlements problems and policies in the countries of southern Europe

Description: The Group of Experts on Housing, Building and Planning Problems and Policies in the Countries of Southern Europe will continue its studies of problems and policies of particular concern to the participating countries. At its next meeting, in Bulgaria in spring 1979, the Group will discuss the relationship between development of housing and tourism.

Method of work: The meetings of the Group of Experts will be held periodically in one of the participating countries to make it easier for the experts to study problems in their national setting and to discuss policies with representatives of the competent public authorities in the country visited. National monographs on topics of particular concern to the countries of southern Europe will be prepared and exchanged at each meeting. In addition, rapporteurs will prepare a basic paper for in-depth discussion

cont.

08.1.9. Human settlements planning and development in the Arctic

Description: As a contribution to the follow-up to the Conference on Security and Co-operation in Europe, the Committee will examine "Problems of life under conditions of cold" with special reference to physical planning aspects, infrastructure development and construction techniques. The results of this project are expected to be of assistance to Governments in the formulation of appropriate policies for the planning and construction of settlements in regions with severe cold climate.

Method of work: On the basis of an issue paper and national monographs prepared by interested countries, a symposium was held at Godthåb (Greenland) in August 1978. Follow-up will be discussed by the Committee in September 1979, taking into account comments on the symposium report expected from the Commission and Principal Subsidiary Bodies concerned.

2

1979

Estimated
duration
(in years)

Estimated
termination
year

08.1.10. Citizen participation in decision-making
relating to human settlements

Description: The Committee will examine methods and means of strengthening citizen participation in decision-making relating to the planning, construction, improvement and management of human settlements. This project will assist ECE Governments in the implementation of the recommendations for national action relating to citizen participation, adopted at the United Nations Conference on Human Settlements (Vancouver, 1976)

Method of work: A seminar will be held in Belgrade in autumn 1980. The preparatory work for the seminar will be discussed at an informal consultation in February 1979. A draft seminar programme and drafts of the basic documentation will be submitted to the Committee for examination in September 1979.

3

1980

WORK AREA 08.2. URBAN AND REGIONAL PLANNING
AND DEVELOPMENT

08.2.2. Promotion of international co-operation in
the field of urban and regional research ^{1/}

Description: The Committee will promote international co-operation in the field of urban and regional research with a view to: promoting common research efforts and sharing research experiences; providing a scientific basis for policy-making concerning urban and regional planning and development; giving participating countries greater access to practical research results; and stimulating individual countries to enlarge their research programmes and to refine their research methodology.

Method of work: The work is monitored by the Group of Experts on Urban and Regional Research which reports to the Committee through the Working Party on Urban and Regional Planning and Development. The Group has two main tasks: (i) to exchange research results and experience on subjects relevant to the activities of the Working Party and (ii) to ensure continuous working contacts and to promote co-operation between National Focal Points which have been designated by 30 ECE countries to serve as clearing houses for the exchange of research results and as promoters of international co-operation. The activities

^{1/} This project covers seven sub-projects. More detailed information on each sub-project is available in document HBP/WP.3/GE.1/13, annex IV.

Estimated duration (in years)	Estimated termination year
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include, inter alia, the organization every fourth year of a conference of leading research officials, the organization of specialized colloquia on topical research subjects and the preparation of annotated lists and national digests on current urban and regional research and research results.

cont.

08.2.3. Urban renewal and the quality of life

Description: The Working Party on Urban and Regional Planning and Development will continue to examine selected urban renewal problems and policies, such as methods of assessing the quality of existing built-up areas, methods of renewing cities, public involvement in the renewal process and the effects of energy considerations in urban renewal. These studies will assist governments in formulating their policies in an area of increasing concern to all ECE countries.

Method of work: Following an in-depth discussion in February 1977 and a symposium in May 1978, a further symposium will be held in May 1979, followed by an in-depth discussion at the eleventh session of the Working Party.

2

1979

08.2.4. Role of transportation in urban planning, development and environment

Description: The Working Party on Urban and Regional Planning and Development will continue to examine the role of transportation in urban planning. The purpose of the project is to update and exchange relevant documentation and experience among Governments so as to facilitate their policy-making in this area.

Method of work: Following seminars in 1973 and 1976, further work will include an exchange of information in the form of case studies to be discussed at ad hoc expert meetings and at the regular Working Party sessions. The project is planned to culminate in a third seminar.

5

1982

08.2.7: Integrated physical, socio-economic and environmental planning

Description: The Working Party on Urban and Regional Planning and Development will continue to study and develop a methodology of integrated physical, socio-economic and environmental planning of human settlements. This project will assist public authorities concerned with physical planning on the national, regional and local levels and will constitute a follow-up to the discussions on integrated planning held at the United Nations Conference on Human Settlements (Vancouver, 1976).

Estimated duration (in years)	Estimated termination year
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Method of work: Following an ad hoc meeting of experts, a theme paper and case studies will be discussed at a seminar to be held in Bergen (Norway) in June 1979 under the joint auspices of the Committee and the Senior Advisers to ECE Governments on Environmental Problems.

2	1979
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WORK AREA 08.3: HOUSING POLICIES

08.3.1. Current housing trends and policies

Description: The Working Party on Housing, at each of its sessions, will conduct an exchange of views on current trends and policies in the field of housing with a view both to keeping Governments abreast of major events in housing and to offering indications for the orientation of the development of the Working Party's programme of work.

Method of work: Drawing on the housing part of the country monographs on current trends and policies in the field of housing, building and planning, oral statements will be made at Working Party sessions concentrating on a few issues of particular interest. A brief summary of the debate will be prepared jointly by rapporteurs from an east and a west European country and appended to the report of the session.

cont.

08.3.3. Financing of housing

Description: The Working Party on Housing will organize an exchange of views on problems facing Governments in the field of financing of housing as well as on experience gained by Governments with regard to related policies and measures, taking into account newly-arising social and economic conditions.

Method of work: Rapporteurs have jointly formulated proposals for future work of practical value to governments. Pilot studies and more detailed proposals for work are being prepared.

4	1981
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08.3.4. Housing management problems

Description: The Working Party on Housing will analyse various aspects of the management of housing and assess their relationship to government housing policy. An exchange of information on current problems, techniques and experience will be undertaken with a view to improving the financial, economic and social efficiency of government policies in this field.

Estimated duration (in years)	Estimated termination year
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Method of work: The scope and content of possible work were reviewed in two papers prepared by rapporteurs. The rapporteurs will next elaborate detailed proposals for work on the basis of the responses by interested countries to their papers

4

1981

08.3.5. Housing forecasting and programming

Description: The Working Party on Housing will continue to exchange periodically information and experience on the programming of housing, including medium- and long-term forecasts of housing needs, both in terms of methodology and numerical data. The purpose of this project is to enhance the operational character of the techniques involved for the benefit of Governments

Method of work: More than twenty countries have prepared monographs on techniques used, problems encountered and results obtained on the basis of a model monograph by Norway. The monographs will be analysed by the secretariat with the assistance of a consultant. A seminar will be held on the subject.

4

1981

08.3.6. Major long-term trends in housing policies

Description: The Working Party on Housing will exchange views on major trends in housing problems and policies with a view to understanding better the complexity of present-day and future problems and policies and to offering guidance in the elaboration and improvement of government policy goals, tools and instruments.

Method of work: The project is being implemented by means of a seminar and a study. The former was limited in scope, covering three themes, for each of which discussion papers were prepared by rapporteurs. The study is more comprehensive and includes a broader evaluation of problems and policies; it is being elaborated by rapporteurs in consultation with the secretariat.

2

1979

08.3.7. Relationship between housing and the national economy

Description: The Working Party on Housing will explore, both from macro- and micro-economic and social standpoints, the manifold correlations which exist between the housing sector and the national economy as they affect the development of economic and social progress, of investments and employment, of wages, prices and consumption as well as all other branches of the national economy, including the financial sector. The purpose of the project is to improve understanding of the short-, medium- and long-term impact of housing policy measures.

Estimated duration (in years)	Estimated termination year
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Method of work: Following an in-depth discussion by the Working Party, two pilot studies - one for eastern and one for western countries - have been prepared along commonly agreed lines. The next stage includes the elaboration of proposals for further work by a larger number of countries at an ad hoc meeting to be held in February 1979.

4

1981

WORK AREA 08.4: CONSTRUCTION AND BUILDING MATERIALS

08.4.2. Environmental problems arising from construction activities

Description: The Working Party on the Building Industry will examine environmental problems arising from the production and transportation of building materials and components and from construction activities. The purpose of the project is to assist Governments in adapting their building policies to take fully into account the environmental consequences of the production and use of building materials and components and of construction activities

Method of work: Following an in-depth discussion and a seminar on the more general aspects of environmental problems arising from construction activities, further work is currently concentrated on problems and policies relating to the working environment in the construction industry. A colloquium, an ad hoc meeting and a seminar are envisaged to be held in 1979-1981.

4

1981

08.4.3. Mechanization in the building industry

Description: The Working Party on the Building Industry will study mechanization problems in the broad sense, including possibilities for increasing efficiency, reducing noise and standardizing machinery and equipment. The purpose of the project is to assist Governments in formulating suitable long-term policies in this field, to stimulate trade in building machinery and equipment and to contribute to a better working environment on the construction site.

Method of work: Following an enquiry on mechanization problems in the building industry and the synthesizing by a rapporteur of the material received, a seminar will be held in Warsaw in May 1979.

2

1979

Estimated
duration
(in years)

Estimated
termination
year

08.4.4. Building research policies

Description: The Working Party on the Building Industry will examine methods and means of planning, organizing, co-ordinating and financing research and development work in the building field. Problems of the education of researchers and the utilization of research results will also be dealt with. The aim is to assist Governments in augmenting and rationalizing their research efforts in the building field and to develop international collaboration further.

Method of work: Following an in-depth discussion by the Working Party and a seminar held in Sweden in 1977, the Working Party will hold an in-depth discussion of further work at its June 1979 session

2

1979

08.4.7. Energy conservation in buildings

Description: The Working Party on the Building Industry will examine the impact of energy considerations on the design, construction, improvement and utilization of buildings, starting with an exchange of experience and information on policies aimed at economizing energy use and promoting the utilization of new energy sources in buildings. This work constitutes a follow-up to the Seminar on the impact of energy considerations on the planning and development of human settlements, held in Ottawa in October 1977.

Method of work: The further scope and development of the project and the method of work to be used for its implementation will be decided by the Working Party at an in-depth discussion in June 1979, based on proposals to be worked out by an ad hoc Group of Experts.

4

1981

WORK AREA 08.5: BUILDING REGULATIONS AND STANDARDS

08.5.2. Information aimed at assisting international trade in building products and know-how 2/

Description: The Working Party on the Building Industry will publish a revised report on building regulations systems in ECE countries and a Directory of regulation information centres and central approval systems for building and building products. It will also promote the production of national guides to building regulations and national catalogues of approved structural systems and building components. It will maintain a list of internationally unified building regulations and promote the production and use of multilingual glossaries and dictionaries.

^{2/} This project covers six sub-projects. More detailed information on each sub-project is presented in document HBP/WP.2/R.104 and Corr.1.

Estimated duration (in years)	Estimated termination year
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Method of work: Initial proposals will be drawn up by rapporteurs. The secretariat will assemble and compile information submitted by member governments and international organizations. Governments will be invited to implement, on the national level, proposals for the guides and catalogues and to use the multilingual glossaries and dictionaries prepared by CMEA and other organizations. A bibliography of multilingual terminological sources will be prepared by the secretariat. 3 1980

08.5.3. Unified approach to the formulation of building regulations and their arrangement 3/

Description: The Working Party on the Building Industry will promote the unification of systems for the disposition of building regulations and for the formulation of requirements in building regulations in functional or performance terms. The method of making reference to standards in building regulations will also be studied. This project will substantially facilitate the entire programme aimed at the harmonization of the technical content of building regulations.

Method of work: Following two ad hoc meetings organized by the ECE in co-operation with the ISO, the CIB other international organizations concerned and a study on methods of classifying regulatory documents, further work includes an enquiry into current practices of making reference to standards in building regulations in ECE countries. 2 1979

08.5.4. International harmonization of the technical content of building regulations 4/

Description: The Working Party on the Building Industry will promote the unification of design and construction requirements in building regulations in respect of: building climatology; building in seismic regions; structural safety, loads and the use of structural materials; fire protection; the internal climate of buildings; dimensional constraints in dwellings and energy conservation in buildings. The general aim is to alleviate technical obstacles to international trade and to assist national authorities in their regulations work through international co-operation.

3/ This project covers two sub-projects. More detailed information on each sub-project is presented in document HBP/WP.2/R.104.

4/ This project covers seven sub-projects. More detailed information on each sub-project is presented in document HBP/WP.2/R.104.

Estimated
duration
(in years)

Estimated
termination
year

Method of work: Intergovernmental and inter-secretariat meetings will be organized by the ECE in co-operation, as appropriate, with other international organizations. Recommendations to governments and international organizations will be considered by the Working Party. The implementation of the Working Party's recommendations will be monitored by the secretariat.

cont.

08.5.5. International harmonization of standards for building

Description: The Working Party on the Building Industry will promote international standardization in the building field. Intensified efforts in this area will include reviews of programmes and priorities established by the relevant international and sub-regional organizations. A list of current international building standards work will be maintained by the secretariat.

Method of work: Recommendations on the involvement of government authorities in the work on building standardization have been agreed by the Working Party. An analysis of information from relevant international organizations will be prepared by the secretariat. Ad hoc meetings will be organized as appropriate. Priorities and co-ordinated programmes needed in support of governmental regulatory and other activities and in support of other ECE projects in the building field will be determined and communicated to the appropriate organizations.

cont.

08.5.6. International harmonization of approval and control rules for buildings and building products

Description: The Working Party will promote the harmonization of national quality approval and control rules operating in respect of building systems and products. This work is established in response to the claim that differences in national approaches to quality approval and control of building products are giving rise to major obstacles to international trade.

Method of work: Following the preparation of initial feasibility reports, investigations will be carried out and proposals will be developed by the secretariat, assisted by consultants. Ad hoc meetings and inter-secretariat consultations will be organized as required.

5

1982

Estimated duration (<u>in years</u>)	Estimated termination <u>year</u>
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WORK AREA 08.6: STATISTICS AND INFORMATION

08.6.1. Bulletin of housing and building statistics

Description: The Committee, together with the Conference of European Statisticians, will continue to collect and regularly publish statistical information on trends in the field of housing and building.

Method of work: The secretariat will collect the requisite information from Governments annually and publish a bulletin in September each year.

cont.

08.6.2. Development of housing, building and planning statistics

Description: The Committee, together with the Conference of European Statisticians, will continue to develop and improve international statistics in the field of housing, building and planning. The aim of the work is to define concepts and definitions, to reach agreement on the tabulations for the presentation of these statistics, to improve and develop the Annual Bulletin of Housing and Building Statistics for Europe and to define the content and presentation of ad hoc statistical publications in the field of housing, building and planning.

Method of work: The project will be pursued in co-operation between rapporteurs and the secretariat. Ad hoc meetings will be organized jointly by the Committee and the Conference of European Statisticians, as required.

cont.

08.6.3. Study tours to assess projects and policies in the field of human settlements

Description: The Committee will organize a study tour in conjunction with its annual session in September every year. The main purpose of the tour is to provide an opportunity for participants to acquaint themselves with new developments and recent accomplishments in the countries visited. The study tour also serves to promote direct contacts with governmental, regional and local authorities in the country visited, to improve understanding of the institutional arrangements and policies pursued and to offer constructive criticism which might be of value to the authorities concerned.

Method of work: Study tours last for one week and culminate in a "round-up" discussion during which delegations comment on what they have seen and exchange views with senior officials responsible for human settlements policies in the countries visited. The

Estimated
duration
(in years)

Estimated
termination
year

programme of study tours includes visits to the following countries: Czechoslovakia (1979); Germany, Federal Republic of (1980); Greece (1981); Bulgaria (1982).

cont.

08.6.4. Co-operation with other regional commissions and with the Commission on Human Settlements

Description: As a follow-up to General Assembly resolution 32/162, the Committee will establish and maintain close contacts with the committees on human settlements in the other regions and with the Commission on Human Settlements. The purpose of this project is to facilitate the use of ECE material and experience in the other regions and to assist in the gradual regionalization of United Nations activities in the field of human settlements.

Method of work: Relevant working documents and reports will be exchanged between the ECE secretariat and the secretariat's of the other regional commissions as well as with interested countries outside the ECE region. Exploratory missions will be undertaken by a consultant to the secretariat with a view to strengthening co-operation with the other regional commissions.

cont.

09. - INLAND TRANSPORT

Estimated duration (in years)	Estimated termination year
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WORK AREA 09.1: MEDIUM- AND LONG-TERM PERSPECTIVES

09.1.1 Review of general trends with regard to transport development and transport policy, including possibilities for projects of common interest; prospects for specific inland transport sectors

Description: The Committee will keep under review and exchange information on general trends in the development of transport and of Government transport policies in order to determine appropriate action. The following project components are included:

- (a) Periodic consideration of new and important developments in respect of inland transport in member countries, with due regard to measures adopted to save energy, fuel and manpower. cont.
- (b) Annual review of information collected in respect of taxes levied on transport and transport equipment. cont.
- (c) Studies with regard to the apportionment of track costs among users of infrastructures as well as with regard to evaluation techniques concerning transport infrastructure investment. cont.
- (d) Specific technological aspects related to one or more modes of transport. cont.
- (e) The prospects for rail transport, in particular with regard to the development of high-capacity rapid transport systems and combined transport. The introduction of new transport technologies and the application of modern techniques to railway operations. cont.
- (f) Studies of various aspects of problems arising in international transport of goods carried by road. cont.

	Estimated duration (in years)	Estimated termination year
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In the framework of this project, the following subjects will inter alia be studied:

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|--|---|-------|
| (i) International financing of infrastructure projects of interest to international traffic. | 2 | 1980 |
| (ii) Optimization of the use of infrastructure for transit traffic, through authorized routes and the levying of taxes and duties and other possible solutions. | 2 | 1980 |
| (iii) Consolidated Resolution on Road Transport Facilitation | 2 | 1980 |
| (iv) Prospects for long distance international goods transport by road, taking into account the future development of other means of transport and the possibility of collaboration with them, in particular regarding combined transport. | 2 | 1980 |
| (g) The collection and periodic publication of information concerning existing bilateral agreements for international road transport. | | cont. |

Method of work: With regard to project components (a) and (g) the Committee will periodically review information collected by means of a questionnaire circulated by the secretariat and other information available and determine any action which can be usefully taken. With regard to project component (b), information collected annually by the secretariat will be circulated for consideration by the Committee. With regard to project components (c), (d) and (e), the Committee will consider at its annual sessions which problems should be taken up by its subsidiary bodies in these fields and make appropriate arrangements for such work. The studies envisaged under (f) will be carried out within the framework of the Working Party on Road Transport, which, when necessary, will formulate proposals for appropriate action.

09.1.2 Co-operation with the Senior Economic Advisers to ECE Governments on the Overall Economic Perspective for the ECE region up to 1990

Description: The Committee will consider and comment where appropriate on the Overall Economic Perspective as elaborated by the Senior Economic Advisers to ECE Governments and will make available to them the results of its own relevant work on project 09.1.1.

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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Method of work: The secretariat will prepare and submit to the Committee the documentation which will be needed for this purpose and will assist the Committee in carrying out its work on this project.

1	1979
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WORK AREA 09.2: TRANSPORT INFRASTRUCTURE AND OPERATIONS

09.2.1. Examination of the possibilities for projects of common interest with a view to long-term co-operation in establishing a coherent navigable network in Europe

Description: The Committee will study the problems arising in connexion with the development of inland water transport in Europe. It will, in particular

- | | | |
|---|---|------|
| (a) examine the possibilities for projects of common interest with a view to long-term co-operation in establishing a coherent navigable network in Europe; | 4 | 1982 |
| (b) study in depth certain aspects of prospects for the development of inland water transport in Europe to be selected by the Committee; | 4 | 1982 |
| (c) study and review of progress with regard to the Danube-Oder (Elbe) connexion; | 2 | 1980 |
| (d) study and review of progress with regard to the Danube-Morava-Vardar/Axios-Aegean Sea connexion | 2 | 1980 |

Method of work: The work will be carried out by the Working Party on Inland Water Transport, on the basis of documents prepared by the secretariat. With regard to project component (c) economic studies are being undertaken by the Group of Rapporteurs for the Economic Study of the Danube-Oder (Elbe) connexion. With regard to project component (d) a group of rapporteurs will review and enlarge the data collected by the consulting firm and the secretariat will distribute those findings when available to the ECE countries interested in this waterway project.

Estimated duration (in years)	Estimated termination year
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09.2.2 Selected technological problems in the
development and operation of inland
water transport

Description: The Committee will exchange information and views on selected aspects of new and improved techniques in inland navigation, their economic importance and appropriate application.

In this connexion, the following project components are to be taken up:

- | | | |
|--|-------|------|
| (a) the use of containers and of ship-borne barges including administrative problems arising in this connexion; | cont. | |
| (b) the effect on productivity of the gradual introduction of special purpose vessels, including container carrying vessels; | cont. | |
| (c) use of computers in the analysis, planning and management of inland water transport; | cont. | |
| (d) modern techniques in inland navigation - pushing; | cont. | |
| (e) devices for coupling pushed barges to one another to pusher craft and to self-propelled pusher barges. | 2 | 1980 |

Method of work: The Working Party on Inland Water Transport will carry out work on the selected problems; the Working Party may also explore the possibilities for convening seminars on some of the selected subjects, e.g. on the technical, operational and economic aspects of pushing techniques.

09.2.3 Selected problems of technological and
economic aspects of urban transport
systems in co-operation with the other
Principal Subsidiary Bodies concerned

Description: The Committee will continue to exchange information on selected topics in this field. cont.

Method of work: The Committee will consider urban transport questions itself or through its competent subsidiary bodies, in particular the Working Party on Road Transport with regard to road traffic aspects, and, where appropriate, at pertinent meetings organized jointly with the Committee on Housing, Building and Planning.

Estimated Estimated
duration termination
(in years) year

09.2.4 Review of situation concerning
implementation and amendments to the
European Agreement on Main International
Traffic Arteries (AGR)

Description: In order to adjust the European road network to present and future requirements, the Committee will take suitable action in order to achieve an early and broad implementation of the Agreement and thereafter to amend as necessary its provisions with regard in particular, to the composition of the network, its numbering, and applicable technical standards.

Method of work: Proposals will be considered at meetings of the Working Party on Road Transport, to be followed by secretariat action with regard to the amendment procedure.

cont.

09.2.5 Development of road networks

(a) Construction of a Trans-European North-South Motorway

Description: With a view to carrying out this project in co-operation with UNDP, */ the countries concerned have, under the auspices of the Committee, established an appropriate framework for the joint study of selected problems connected with the construction of the motorway and for ensuring the necessary co-ordination in the execution of such studies.

Method of work: Progress reports will be reviewed periodically by the Working Party on Road Transport.

3

1981

(b) Study of problems connected with linking of the European road network to that of other regions.

Description: In co-operation with ESCAP, **/ ECWA, ***/ and ECA, ****/ and taking into account the activities of the Ad Hoc Meeting on the Development of the International Road Network in South-East Europe, the

*/ United Nations Development Programme.

**/ Economic and Social Commission for Asia and the Pacific (ESCAP).

***/ Economic Commission for Western Asia (ECWA).

****/ Economic Commission for Africa (ECA).

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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Committee will promote the study of problems connected with the development of inter-regional road links, in particular in areas where the recent road transport increase has created difficulties, the possibility of utilization of car ferry and piggy-back services being also envisaged.

Method of work: Exchange of information between the secretariats of the regional economic commissions concerned and, where appropriate, ad hoc meetings of the representatives of the countries concerned.

5	1983
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09.2.6 Automatic railway coupling

Description: The Committee will follow developments affecting problems relating to the introduction of automatic coupling, including arrangements for its financing, and it will study the preparation of a draft international agreement relative to the introduction of automatic coupling.

Method of work: The Working Party on Rail Transport will periodically review the progress made.

cont.

09.2.7 Development of rail transport

Description: The Committee will study trends and difficulties, including the problems of the railway's share in connexion with long-distance transport, in particular to the Middle East with regard to infrastructure and operational requirements.

4	1982
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Method of work: The work will be carried out by the Working Party on Rail Transport and in co-operation with the secretariats of ECWA and ESCAP.

WORK AREA 09.3: FACILITATION OF INTERNATIONAL TRANSPORT

09.3.1. Review of the application and
modification of European Agreements
and recommendations concerning the
transport of dangerous goods

Description: The Committee will keep under review the provisions concerning the international carriage of goods in the region, as set out in international agreements and recommendations and will decide

Estimated duration (in years)	Estimated termination year
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periodically on the measures required to keep them up to date and facilitate their implementation. This project will comprise the following components in particular:

- | | |
|---|--------|
| (a) Harmonization and modernization of the pertinent provisions of the ADR and RID, and in particular consideration of proposed amendments relating to those parts of annexes A and B of the European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR) which are common to ADR and to the Regulations concerning the International Carriage of Dangerous Goods by Rail (RID). | cont. |
| (b) Consideration of proposed amendments to the provisions of ADR concerning road transport and to the provisions of ITC Resolution No. 223 relating to the European Provisions concerning international Carriage of Dangerous Goods by Inland Waterways (ADN). | cont. |
| (c) Handling of administrative and technical questions arising from the implementation of the ADR. | cont. |
| (d) Co-operation with the United Nations Economic and Social Council's Committee of Experts on the Transport of Dangerous Goods and its subsidiary bodies, in particular as regards the Inland Transport Committee's participation in the possible preparation of a world-wide Convention on the carriage of Dangerous Goods by all modes of transport. | 4 1982 |

Method of work: With regard to project component (a), the proposals will be considered at the Joint Meetings of the RID Safety Committee and the ECE Group of Experts on the Transport of Dangerous Goods. The latter group will also consider proposals and studies relating to project components (b) and (d). With regard to project component (c), the secretariat will circulate to Governments copies of bilateral agreements authorizing certain transport operations by temporary derogation from the provisions of ADR annexes A or B.

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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09.3.2 Selected problems of simplification
and harmonization of administrative
formalities and Customs procedures in
the field of international transport,
in particular at frontiers

Description: The Committee will follow developments in this field and select suitable problems for consideration. Components of this project are:

- | | | |
|---|-------|------|
| (a) Study of information on the difficulties encountered at frontiers by rail transport with regard both to the administrative organization and to the capacity of installations with a view to eliminating such difficulties, and review of related activities of international organizations concerned. | cont. | |
| (b) Study of Customs questions with a view to simplification of Customs formalities and documents in the field of transport. | cont. | |
| (c) Study of ways and means of preventing abuse of the advantages resulting from the introduction of simplified Customs procedures, including review of implementation of Resolution No. 220 (prevention of the abuse of Customs transit systems by drug smugglers). | 2 | 1980 |
| (d) Study of selected problems with a view to reducing delays and formalities at frontiers; study of harmonization of conditions for exercising Customs and other controls undertaken at frontiers (health, phytosanitary, veterinary and quality controls; application of standards; public safety controls); harmonization and simplification of documentation required in international road transport; facilitation of road transport of perishable foodstuffs. | 5 | 1983 |

Method of work: With regard to project component (a), the Working Party on Rail Transport implements this project component.

With regard to project components (b) and (c), the Group of Experts on Customs Questions affecting Transport (in co-operation, where appropriate, with the Committee on the Development of Trade through the secretariat in respect of (b)) is implementing these

Estimated duration (in years)	Estimated termination year
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project components, while the Inland Transport Committee and its subsidiary bodies concerned, as required, implement project component (d).

09.3.3 Elaboration of, review of implementation and where appropriate, modification of Conventions in the field of inland transport

Description: The Committee will consider periodically the status with regard to the entry into force and application of Conventions and Agreements drawn up under the auspices of the Inland Transport Committee, with a view to deciding whether new conventions should be elaborated, amendments should be prepared or revisions undertaken. 1/

Method of work: The Group of Experts on Customs Questions affecting Transport considers at its sessions questions concerning the Customs Conventions and resolutions related thereto, in particular problems arising in connexion with the implementation of the 1975 TIR Convention. It will study the possible extension of the TIR Convention to other regions and various aspects involved, including a possible link between Customs transit systems. It will also review existing Conventions in connexion with the possible updating of their provisions.

cont.

The Working Party on Road Transport will review questions concerning the application of the various conventions under its competence. The Working Party on Inland Water Transport and its Group of Experts on River Law consider at their sessions questions concerning the implementation of inland navigation conventions (including possible resumption of work on a draft Convention on the Contract for Carriage of Goods by Inland Navigation (CMN)).

cont.

1/ For other projects referring to specific Conventions, see projects 09.2.4, 09.3.1, 09.3.4, 09.3.7 and 09.3.8.

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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- 09.3.4 Promotion of combined transport and study of requirements for multimodal transport equipment and its utilization, including co-operation with UNCTAD */ with regard to drafting a convention on international multimodal transport and its work on container standards

Description:

- (a) The Committee will select administrative, technical, economic and legal aspects of multimodal transport, for study with a view to the development of appropriate measures to promote combined transport and to promote maximum utilization of equipment used for such transport. It will also study standardization and harmonization of dimensions, handling requirements, marking, coding, and identification systems for containers, possibilities of standardization of piggy-back equipment and review the development of new services and technology in combined transport.
- (b) The Committee co-operates with UNCTAD in the elaboration of a draft convention on international multimodal transport dealing inter alia with the liability and documentary régime of such transport, and in its work on container standards for international multimodal transport.

cont.

2	1980
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Method of work: Consideration, on the basis of studies prepared by the secretariat and by experts, at sessions of the Group of Experts on Combined Transport, and the Group of Experts on Customs Questions affecting Transport for Customs aspects of co-operation with UNCTAD, and secretariat co-operation with the UNCTAD secretariat and other international organizations.

*/ United Nations Conference on Trade and Development.

Estimated duration (in years)	Estimated termination year
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09.3.5 Development of the work and studies now being carried out aiming at the elimination of disparities arising from the legal provisions applied to traffic on inland waterways which are subject to international conventions, and in particular, the disparity in the application of those provisions

Description and method of work: The Committee will examine this problem as part of its ongoing work and will decide in due course on the method of work to be followed.

cont.

09.3.6 Standardization of technical requirements for inland waterway vessels and ship's certificates

Description: The Committee will continue or undertake work on:

- | | | |
|--|---|------|
| (a) Standardization of technical requirements for commercial craft and the application of these requirements to vessels in service. | | |
| (b) Standardization of additional technical requirements for pushed barges and their equipment. | 2 | 1980 |
| (c) Criteria for the definition of the maximum number of persons on board pleasure craft. | 2 | 1980 |
| (d) Standardization of and reciprocal recognition of certain ships' papers with a view to elaborating or updating resolutions on these subjects. | 2 | 1980 |
| (e) Harmonization of the standards to be applied to techniques for the prevention of water pollution by inland navigation vessels. | 2 | 1980 |

cont.

Method of work: This project will be implemented by the Group of Experts on the Standardization of Technical Requirements for Vessels and of Ships' Papers.

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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09.3.7 Selected problems of harmonization of regulations and standards with regard to the international transport of perishable foodstuffs and the special equipment used for such transport, including application of the Agreement on the International Carriage of Perishable Foodstuffs and on the special equipment to be used for such carriage (ATP)

Description: With a view to facilitating the international transport of perishable foodstuffs, the Committee will consider, as and when required, selected problems, in particular with regard to:

- (a) The application of the ATP and, where appropriate, its modification.
- (b) The application of the Committee's resolutions on standardization of packagings for certain perishable foodstuffs.
- (c) The follow-up of the implementation of Resolution No. 218 recommending the reciprocal recognition of certificates of conformity for insulated, refrigerated, mechanically-refrigerated or heated equipment used for the international carriage of perishable foodstuffs by land.

cont.

cont.

1

1979

Method of work: Study of the problems involved by the Group of Experts on the Transport of Perishable Foodstuffs, and where appropriate in co-operation with the Working Party on Standardization of Perishable Produce with a view to possible modification of the ATP and the resolution

09.3.8 Elimination of technical barriers to international trade in motor vehicles and their equipment and parts

Description: With a view to developing standards for motor vehicle equipment and parts, the Committee will keep up to date and supplement the thirty-nine regulations at present annexed to the 1958 Agreement concerning the Adoption of Uniform Conditions of Approval and Reciprocal Recognition of Approval for Motor Vehicle Equipment and Parts, considering in particular the following project components:

Estimated duration (in years)	Estimated termination year
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- | | | |
|--|-------|------|
| (a) Review and development of the 1958 Agreement and its annexes. | cont. | |
| (b) Completion of a set of technical regulations for "type approval" of the vehicle as a whole. | 3 | 1981 |
| (c) Harmonization of test procedures and other requirements for motor vehicle certification or approval. | 6 | 1984 |

Method of work: Consideration of problems raised within or proposals submitted to, the Group of Experts on the Construction of Vehicles and its subsidiary bodies. With regard to (c), the study of various aspects of a possible harmonization of test procedures and other requirements for vehicle certification or approval.

09.3.9 Problems of special interest to member countries of ECE which are developing from the economic point of view

Description: The Committee will consider, where appropriate, questions of particular concern to such countries, e.g. the promotion of the development of an efficient transport system and an adequate transport infrastructure, Customs facilitation.

Method of work: The Committee's subsidiary bodies will consider, should the need arise, proposals and will take into consideration the possible consequences of the various conventions and resolutions proposed, concerning the European countries which are developing from the economic point of view.

cont.

09.3.10 Study of the possibility of developing an all-European system of road transport for goods

Method of work: Proposals will be considered within the Working Party on Road Transport.

2	1980
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Estimated duration (in years)	Estimated termination year
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WORK AREA 09.4: TRANSPORT SAFETY

09.4.1 Selected problems in the transport of dangerous goods including the movement of newly developed dangerous goods in international traffic and the introduction of new transport techniques and equipment

Description: The Committee will study problems arising in transport of newly developed toxic substances, and will also study derogations from the provisions of annex A of ADR for the purpose of carrying out the trials necessary with a view to amending the provisions of that annex.

Method of work: Consideration by the Joint Meetings of RID Safety Committee and the Group of Experts on the Transport of Dangerous Goods.

cont.

09.4.2 Selected problems of harmonization and codification of administrative and technical provisions concerning safety in inland water transport, including navigation rules and signalling systems and certificates of competence for boatmen and pleasure craft owners

Description: The Committee will continue to deal with selected problems relating to the harmonization of safety requirements for inland navigation in Europe. This project consists of the following components:

- (a) Application of the European Code for Inland Waterways (CEVNI) and the provisions concerning Signs and Signals on Inland Waterways (SIGNI).
- (b) Revision of CEVNI and SIGNI with a view to the harmonization of the rules of the road and signs and signals used in various inland waterways.
- (c) Application of Resolutions No. 13 and 14 revised concerning the international certificate for pleasure craft and the international certificate concerning the competence of pleasure craft operators.
- (d) Study of the unification of requirements for the issue of boatmasters' certificates with a view to their reciprocal recognition of certain purposes.

cont.

4 1982

cont.

3 1981

	Estimated duration (in years)	Estimated termination year
(e) Study of the problem of the unification of the rules concerning civil liability and compulsory insurance of owners and users of pleasure craft.	5	1983
(f) Study of possible codification of existing safety provisions concerning inland navigation.	6	1984

Method of work: With regard to project components (a), (b) and (c), the Group of Experts on the Standardization of Rules of the Road and Signs and Signals in Inland Navigation will consider the application and possible modification of resolutions on this subject; with regard to project component (d), the Group of Experts on the Standardization of Technical Requirements for Vessels and of Ships' Papers will continue to review proposals before it; while project components (e) and (f) are under consideration by the Working Party on Inland Water Transport.

09.4.3 Safety requirements for the construction, transport and handling of containers

Description: The Committee will review periodically safety requirements applicable to construction and use of all types of containers to meet the requirements of new operational and technical developments, and exchange views on interpretation and application of the International Convention for Safe Containers (CSC).

Method of work: Work on this project will be carried out by the Group of Experts on Combined Transport and in co-operation with IMCO */ through the secretariat.

cont.

09.4.4 Safety requirements for road transport including safety standards for vehicle construction and inspection; road traffic rules, road signs, signals and markings, and drivers' competence and other road users' behaviour

Description: The Committee will select problems for study with a view to the adoption of international provisions and recommendations concerning: road signs, signals and markings; drivers' and other road users' behaviour; maximum driving time and other conditions applicable to professional drivers; vehicle construction

*/ Inter-Governmental Maritime Consultative Organization.

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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and inspection; and the possibility of establishing the principles for the setting up of an all-European system of technical assistance for vehicles engaged in international transport.

Method of work: This work will be carried out by the Working Party on Road Transport and its subsidiary bodies.

cont.

09.4.5 Safety provisions for ropeways

Description: The Committee will review safety provisions for ropeways and in particular, Resolution No. 208 on installations for transport by rope and ski-lifts open to the public.

Method of work: Consideration of draft proposals by the Inland Transport Committee.

cont.

09.4.6 Safety regulations for transport
of petroleum products by pipeline

Description: The Committee will exchange information on safety regulations in this field.

Method of work: Circulation of documentation, where appropriate, for consideration by the Inland Transport Committee.

2

1980

09.4.7 Co-operation with other regional
economic commissions in sharing ECE
experience in promoting transport
safety

Description: Study of problems of mutual interest in the field of transport safety.

Method of work: The ECE secretariat will, as appropriate, keep the secretariats of other regional economic commissions informed concerning the results of relevant studies undertaken within the ECE.

4

1982

Estimated duration (in years)	Estimated termination year
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WORK AREA 09.5: ENVIRONMENTAL AND RESOURCE SAVING ASPECTS

09.5.1 Prevention of water pollution and control
of noise caused by inland navigation
vessels

Description: The Committee will continue its work on the implementation of Resolution No. 18 concerning the prevention of water pollution by inland navigation vessels and work concerning the control of noise and vibration caused by such vessels.

Method of work: The Group of Experts on the Transport of Dangerous Goods will elaborate recommendations on measures to be taken to prevent pollution during the carriage of dangerous goods and the Working Party on Inland Water Transport will continue its work on the implementation of Resolution No. 18.

cont.

09.5.2 Reduction of pollution and noise in
road transport

Description: The Committee will study relevant technical questions */ with a view to a progressive reduction of existing admissible limits concerning noise and emission of pollutants by vehicles, and also with a view to preventing pollution which might be caused during the transport of dangerous goods.

Method of work: Elaboration of recommendations and draft regulations by the Group of Experts on the Construction of Vehicles and its subsidiary bodies, and, with regard to pollution during the transport of dangerous goods, by the Group of Experts on the Transport of Dangerous Goods.

cont.

09.5.3 Increased economy and efficiency in
energy consumption in transport

Description: The Committee will study energy-related aspects of transport policy and transport operations involving the following project components:

*/ For specific problems at present under consideration see TRANS/SC1/WP29/R.128/Rev.1.

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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- (a) Review of policy measures adopted to save energy, and fuel in order to determine appropriate action.
- (b) Development of methods for reducing the cost of electrification and dieselization, and of methods, applied or under study, aiming at reduction of energy consumption in railway operations.
- (c) Study of technical problems related to the use and possible economy of fuel by vehicles.
- (d) Study of the implications of the use of alternative sources of power (electricity).

Method of work: With regard to project components (a) and (b), developments will be reviewed by the Inland Transport Committee and its subsidiary bodies respectively. With regard to project components (c) and (d) studies undertaken by the Group of Experts on the Construction of Vehicles will be reviewed.

5

1983

WORK AREA 09.6: STATISTICS AND INFORMATION

09.6.1 Statistical bulletin concerning inland transport and road traffic accidents

Description: In the light of its current work the Committee will determine the need for the collection of statistics on inland transport and traffic, including container transport and on road traffic accidents.

Method of work: The secretariat will collect data by means of questionnaires drawn up in the light of decisions taken by Groups of Experts on Transport Statistics, on Road Traffic Safety, and the Group of Experts on Combined Transport, and arrange for their publication in the appropriate bulletins.

cont.

Estimated duration (in years)	Estimated termination year
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09.6.2 Elaboration of internationally comparable and agreed standards, methods of collection, definitions and terms for inland transport and road traffic accident statistics

Description: The Committee will continue its work with regard to development of appropriate terminology and definitions, as well as methodology for collecting statistics relating to inland transport, involving the following project components:

- | | | |
|--|-------|------|
| (a) Consideration of proposals for additions to the Glossary and for terms and definitions used for statistical purposes. | cont. | |
| (b) Review of the Commodity Classification for Transport Statistics in Europe (CSTE) in the light of the Standard International Classification of all Goods and Services (ICGS) as it relates to transport, the Standard International Trade Classification, Revision 2 (SITC), and other relevant nomenclatures. | 2 | 1980 |
| (c) Study of specific aspects of the methodology employed in collecting statistics on international and national inland transport, container transport and port traffic. | cont. | |
| (d) Study of specific aspects of the development of statistics on road traffic and road traffic accidents including review of methods for obtaining statistics on international basis, the study of sample survey methods applied to road traffic and transport and of methods of collecting complete data on road transport. Review of statistical work on road traffic and road traffic accidents being undertaken in other international organizations. | cont. | |
| (e) Study of simplified methods of carrying out censuses in general and their application to the transport field. | cont. | |
| (f) Development of standards and methodology for statistics concerning the use of energy in transport. | cont. | |

	<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
(g) Consideration of guidelines for a system of price and quantity statistics and its implementation in the transport field.	cont.	
(h) Review of the implementation of European Programme of Basic Inland Transport Statistics and analysis of the methods used for the collection of statistics set out in this programme.	cont.	
(i) Development of uniform guidelines for the collection and publication of container transport statistics.	2	1980

Method of work: Work on these problems will be carried out by the Group of Experts on Transport Statistics, in co-operation with the Conference of European Statisticians with regard to project components (g) and (h), with the Group of Experts on Road Traffic Safety with regard to project component (d), and with the Group of Experts on Combined Transport with regard to project components (c) and (i).

09.6.3 Road traffic censuses

Description: The Committee will draw up recommendations for taking road traffic censuses at regular intervals.

Method of work: Recommendations will be drawn up by the Group of Experts on Transport Statistics and by ad hoc meetings convened for this purpose. The results will be published in tabular and map form by the secretariat.

cont.

09.6.4 Publication of maps of inland
waterways used in international
traffic

Description: The Committee will periodically consider the preparation of maps on the subject.

Method of work: Preparation and publication by the secretariat, on the basis of information provided by Governments and River Commissions.

cont.

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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09.6.5 Periodical circulation of
consolidated selected information
concerning national road transport
requirements

Description: The Working Party on Road Transport will assist in the collection, preparation and keeping up to date of information on national requirements concerning selected items of interest to international road transport and road safety, such as weights and dimensions of vehicles; the application of the green card system for motor car insurance and existing maximum speed limits for various categories of vehicles, etc.

Method of work: The relevant documentation will be prepared by the secretariat on the basis of information provided by Governments.

cont.

10. - SCIENCE AND TECHNOLOGY

	Estimated duration (in years)	Estimated termination year
<u>WORK AREA 10.1: LONG-TERM TRENDS AND PERSPECTIVES</u>		
10.1.1. <u>Co-operation with the Senior Economic Advisers to ECE Governments on the Overall Economic Perspective for the ECE Region up to 1990</u>		
<u>Description:</u> Bearing in mind decision G (XXXII), the Senior Advisers on Science and Technology will identify and examine economic sectors in which major technological change is likely to be required or to occur up to the year 1990, with a view to providing information to national authorities who will be making decisions affecting long-range developments in these sectors.		
<u>Method of work:</u> Studies will be prepared for consideration by meetings convened under the joint auspices of the Senior Economic Advisers and the Senior Advisers on Science and Technology.		
	4	1980
10.1.1.1. The methodology of performing technological forecasts		
<u>Description:</u> The Senior Advisers will review experience in the application of various methodologies to the forecasting of technological developments and the procedures for performing international co-operative forecasts with a view to improving the quality of forecasts and international co-operation in this field.		
<u>Method of work:</u> A Seminar will be convened in Spain in 1979 on Co-operative Technological Forecasting: review and selection of methodologies appropriate to co-operative technological forecasting with initial application to solar energy. (See also project 10.1.3 below.)		
10.1.2. <u>Study of interrelationships between economic and technological developments</u>		
<u>Description:</u> The relationships between technological progress and economic activities, both on a sectoral and on a national basis, will be examined with a view to improving the understanding of policy-makers of those relationships and the means of influencing them.		
<u>Method of work:</u> Studies will be prepared by the secretariat.		
	3	1981

Estimated duration (in years)	Estimated termination year
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10.1.5. Technological trends up to 1990 and prospects in major economic sectors

Description: The Senior Advisers will examine possible and probable major technological trends and anticipated needs for innovation by means of technological forecasts as appropriate, up to the year 1990, in selected economic sectors such as basic industrial materials and energy, with a view to assisting policy-makers who will be making recommendations and taking decisions affecting activities in these fields.

Method of work: A Seminar will be convened in Spain in 1979 on Co-operative Technological Forecasting: review and selection of methodologies appropriate to co-operative technological forecasting with initial application to solar energy (see project 10.1.1.1 above). The Seminar should provide a forum for younger scientists and technologists to meet with eminent specialists in this field (see also project 10.5.3). The results of the Seminar will be transmitted to the secretariat of the United Nations Conference on Science and Technology for Development (UNCSTD) as an additional contribution to that Conference from the ECE. The recommendations of the Seminar concerning a co-operative technological forecasting exercise in respect of solar energy will be considered by the Senior Advisers at their eighth session.

2

1979

10.1.3.1. Technological trends in basic materials and natural resources

Description: Reviews of the technological prospects of selected basic materials will be undertaken in order to provide information on any problems which may arise and possible solutions to them.

Method of work: To be completed in the light of the relevant discussions at the thirty-fourth session of the Commission, particularly those concerning the Report of the Executive Secretary on "Concentration, integration and co-ordination of the Commission's activities in the field of science and technology".

cont.

10.1.3.2. Technological forecasting in the energy field.

Description: The Senior Advisers will examine prospective technological needs in the energy field as well as the evaluation of current technologies.

Estimated
duration
(in years)

Estimated
termination
year

Method of work: To be completed by the Senior Advisers on Science and Technology at their eighth session in the light of the recommendations of the Seminar on Co-operative Technological Forecasting (see projects 10.1.1.1 and 10.1.3 above).

10.1.4. Technology assessment

Description: The Senior Advisers at their annual sessions will assess the economic, social and environmental consequences of prospective technological developments in order to identify effects which may require special attention on the part of national authorities.

Method of work: The study on the "Environmental aspects of energy production and use, with particular reference to new technologies" has been completed. It will be published by the secretariat at the earliest possible date.

2

1979

WORK AREA 10.2: CURRENT DEVELOPMENTS IN SCIENCE AND TECHNOLOGY POLICIES

10.2.1. Changes in national science and technology policies, priorities and institutions including orientation and administration of research policies

Description: A biennial review will be undertaken of the major changes occurring at the national level in science and technology policies, priorities in the fields of science and technology policies, priorities in the fields of science and technology and the institutional arrangements for the evaluation and implementation of policies, with a view to ensuring that these changes and the reasons for them are known.

Method of work: To be completed by the Senior Advisers at their eighth session.

cont.

10.2.2. Review of international bilateral and multilateral scientific and technological co-operation

Description: Periodic reviews will be prepared of international scientific and technological co-operation agreements and understandings with a view to ensuring that a current register of bilateral and multilateral agreements is maintained.

Estimated duration (in years)	Estimated termination year
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Method of work: Governments will provide information for incorporation by the secretariat in periodic reviews and analyses of particular bilateral agreements

cont.

10.2.3. Identification of problems requiring priority attention in national and international scientific and technological policies

Description: The major problems which may arise in selected technological fields will be identified in order that they may be given priority attention by national authorities.

Method of work: Review and analysis of selected areas for consideration by the Senior Advisers at their annual sessions.

cont.

WORK AREA 10.3: INTERNATIONAL CO-OPERATION IN SCIENTIFIC AND TECHNOLOGICAL RESEARCH

10.3.1. Review of scientific and technological research in selected problem sectors

Description: Reports of the research plans and needs in sectors as proposed by member countries will be prepared with a view to identifying those which might be included in the programme of work of the Senior Advisers.

Method of work: (i) The secretariat will prepare, in consultation with interested Governments, a detailed proposal, for consideration by the Senior Advisers at their eighth session, concerning the organization and possible subject-matter of a seminar on international aspects of R and D in the Arctic, with a view to a final decision being taken at that session on whether such a seminar should be convened and its date - possibly in 1981; and (ii) the selection of a specific theme for co-operative research will be made after the United Nations Conference on Science and Technology for Development has taken place.

10.3.1.1. Improvements to existing energy technologies and research and development on new energy sources

10.3.1.1.1. Technologies related to new energy sources

Description: A review of the research and development efforts at the national level in the field of new energy sources will be prepared with a view to identifying possible international co-operative R and D projects.

Estimated duration (in years)	Estimated termination year
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Method of work: (i) A Seminar on New Energy Sources will be held in the Federal Republic of Germany in 1979; and (ii) The secretariat will start work on the first stage of the international co-operative research and development study on solar energy utilization referred to in document SC.TECH./AC.13/2/Add.1, but excluding action referred to in the first subparagraph of paragraph 5 of that document.

10.5.1.1.2. Technologies connected with the utilization of low-calorific-value fuels

Description: A review of priority research and development problems in the field of low-calorific-value fuels will be conducted with a view to establishing international co-operative projects.

Method of work: (i) The Senior Advisers will undertake a study on new technologies for the integrated utilization of low-calorific-value solid fuels, with a view to efficient simultaneous production of energy and industrial products resulting in a considerable decrease in environmental pollution, with the co-operation of the following ECE Principal Subsidiary Bodies: Committee on Electric Power; Coal Committee; Committee on Gas; Chemical Industry Committee; Steel Committee; Committee on Housing, Building and Planning; and Committee on Environmental Problems. In order to initiate the study the secretariat will consult with the authorities of certain ECE member countries experienced in the integrated utilization of low-calorific-value fuels with a view to: appointing two rapporteurs to prepare a first outline of the study and suggestions on its practical realization; and considering the possibility of utilization of their research and development facilities as a focal point for research related to the above-mentioned study. The Senior Advisers on Science and Technology will be informed about the results of these activities at their eighth session;

(ii) The Senior Advisers will hold joint bi-annual ad hoc meetings with the Coal and Electric Power Committees and with experts from the participating countries to consider the inclusion, in the programme of the Bulgarian laboratory, of projects for international co-operative research, and in order to discuss their further implementation. On the basis of the information provided by the laboratory, and that of participating countries, the secretariat will issue a Note for the consideration of the Senior Advisers and other Principal Subsidiary Bodies concerned on the progress of research and the perspectives for implementation of the developments; and

Estimated duration (in years)	Estimated termination year
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(iii) Annual outlines will be worked out on the status and achievements of R and D by countries participating in the project. The countries participating in the project will submit annual reports on the research undertaken which will then be summarized by a group of experts.

3	1982
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10.3.2. Study of possibilities for expanding and promoting multilateral co-operation

10.3.2.1. The preparation of an ECE Guide on the organization and management of international co-operative research.

Description: The Senior Advisers will consider the possibility of the preparation of a Guide on the organization and management of international co-operative research.

Method of work: An ad hoc meeting will be convened [in 1979] to make proposals regarding the scope and content of the Guide as well as its possible method of preparation. On the basis of the recommendations of this ad hoc meeting, the Senior Advisers will take a final decision at their eighth session on whether to proceed with the preparation of the Guide.

3	1980
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WORK AREA 10.4: TRANSFER OF TECHNOLOGY

10.4.1. Exchange of information and experience on transfer of technology by use of commercial channels and on models of identifying and transferring technological and scientific developments

Description: Case-studies of transfers of technology between enterprises in selected industrial sectors operating in countries with different economic and social systems and at different levels of economic development will be undertaken in order to identify any difficulties as well as to promote such transfers and the actions required to facilitate smooth intra-regional flows of technology.

Method of work: Governments will be invited to arrange for the preparation of further case-studies on the experience of their enterprises engaged in international technology transfer according to the framework contained in document SC.TECH./R.58, with the exception of section V: "Balance sheet of the

Estimated duration (in years)	Estimated termination year
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experience analysed", and for their transmission to the secretariat. (The final date for receipt of such studies is 30 June 1979.) The secretariat will prepare a comparative analysis of all case-studies received up to the deadline for presentation to the Senior Advisers at their eighth session. Work on this project will be performed in close co-operation with the Committee on the Development of Trade.

10.4.2. Measures to promote the transfer of technology between ECE member countries

Description: The difficulties in and facilitation of the transfer of technology between countries with different economic and social systems and at different levels of economic development within the ECE will be examined, and initiatives taken to improve the intra-regional flows of technology.

Method of work: Studies for review by ad hoc meetings or seminars will be carried out by the secretariat using, inter alia, the case-studies prepared under project 10.4.1.

3

1980

10.4.2.1. Studies on the institutional, administrative, economic and legal factors affecting the transfer of technology in the ECE region

Description: The Senior Advisers, in co-operation with the Committee on the Development of Trade, will examine factually-based reference material on those aspects of the international transfer of technology relating to governmental structures and administrative, economic and legal factors with a view to developing an information base for enterprises involved in international transfers of technology in the ECE region.

Method of work: The Senior Advisers will co-operate with the Committee on the Development of Trade on this project with a view to convening in 1979 a joint preparatory meeting to select a topic within the subject area and to make other preparations for a joint Seminar on the Transfer of Technology in the ECE Region, to be held in 1980. In this connexion, the document entitled "Manual on licensing procedures and related aspects of technology transfer" (SC.TECH./R.72: TRADE/R.374 and Add.1) and "Case-studies on the transfer of technology" (SC.TECH./R.73) will serve as background documents for the preparatory meeting.

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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10.4.2.2. Preparation of a Manual on licensing procedures and related aspects of technology transfer

Description: The Senior Advisers, in co-operation with the Committee on the Development of Trade, will draw up a Manual on licensing procedures and related aspects of technology transfer with a view to making such a Manual available to enterprises which are engaged in the licensing of technology or its transfer within the ECE region.

Method of work: The Committee on the Development of Trade at its twenty-seventh session will be invited to consider questions related to the publication of the Manual. An ad hoc Meeting to examine the national chapters transmitted by Governments from the point of view of terminology and consistency of presentation will be held in Geneva from 17 to 19 January 1979. It is anticipated that the Manual will be published in mid-1979.

WORK AREA 10.5: OTHER CO-OPERATIVE ACTIVITIES

10.5.1. Development of the statistics of science and technology (to be carried out in co-operation with the Conference of European Statisticians and UNESCO)

Description: The need for new statistics to assist science and technology policy-makers as well as the interpretation and adequacy of existing statistics will be studied in order to provide policy-makers with improved means of assessing the need for new policies and the effects of current ones. For the first of these studies, the Senior Advisers will initiate, in conjunction with UNESCO and the Conference of European Statisticians, activities to identify and better to define indicators of the amount of international technology transfers.

Method of work: In accordance with a format established by the secretariat, member Governments will provide a list, with definitions, of the indicators which could be used to measure technology transfer together with information on the policy areas for which these indicators are considered most applicable. The deadline for transmission to the secretariat of replies to the questionnaire is 31 March 1979. The secretariat will present

Estimated duration (in years)	Estimated termination year
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an analysis of the replies received to the questionnaire and submit it to the next session of the Conference of European Statisticians for its comments. An evaluation of the replies received, including comments from the Conference of European Statisticians, will be prepared by the secretariat for the eighth session of the Senior Advisers and distributed to member countries well in advance of that session.

2

1980

10.5.2. Contribution to the preparations for the United Nations Conference on Science and Technology for Development

Description: In conformity with Commission decision A(XXXII) and in accordance with the decisions taken by the Senior Advisers at their seventh session the Senior Advisers will make preparations at the regional level with the participation of the Secretary-General of the Conference and other organizations of the United Nations system concerned for the United Nations Conference on Science and Technology for Development.

Method of work: (i) The final version of the European regional paper as adopted by ECE member Governments at the seventh session of the Senior Advisers will be forwarded to the UNCSTD secretariat; (ii) The secretariat will prepare a background reference document for submission to the Conference containing summaries of the activities of the regional and sub-regional organizations and groups of countries referred to in the final version of the European regional paper; and (iii) The results of the Seminar on Co-operative Technological Forecasting which will be held in June 1979 in Spain will be transmitted to the UNCSTD secretariat as an additional contribution to the Conference by the ECE.

10.5.3. Sponsoring of conferences, symposia, and study and working groups such as those that would bring together younger scientists and technologists with eminent specialists in their field

Description: Study groups which will assist in informing younger scientists and technologists about technical matters of high international importance will be organized with a view to fostering greater international co-operation in science and technology.

Estimated duration (in years)	Estimated termination year
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Method of work: (i) The Senior Advisers will sponsor, within the context of their present work programme, the participation of younger scientists and technologists through their attendance at the seminars which will be convened under their aegis during 1979 and 1980;

(ii) The Senior Advisers will proceed with preparations for the Seminar on Co-operative Technological Forecasting to be held in Spain in June 1979;

(iii) They will also convene a Seminar on New Energy Sources, to be held in the Federal Republic of Germany in December 1979, and two seminars in 1980: one on a subject related to the evaluation of R and D, and the other, in co-operation with the Committee on the Development of Trade, on a selected factor related to the transfer of technology and which could also be convened in co-operation with one or more other organizations such as UNESCO; and (iv) The secretariat will prepare, in consultation with interested Governments, a detailed proposal for consideration by the Senior Advisers at their eighth session concerning the organization and possible subject-matter of a seminar on international aspects of R and D in the Arctic, with a view to a final decision being taken at that session on whether such a Seminar should be convened and its date - possibly in 1981.

11.- ECONOMIC PLANS, PROGRAMMES AND PERSPECTIVES

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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WORK AREA 11.1: MEDIUM- AND LONG-TERM PLANS,
PROGRAMMES AND PERSPECTIVES

11.1.1. Exchange of information on the preparation
and general orientation of plans, programmes
and prospects on the medium- and long-term
development of national economies

Description: The Senior Economic Advisers will continue to exchange information on the preparation and implementation of medium- and long-term plans, programmes and prospects, and on longer-term policy orientations including future development patterns envisaged by individual countries.

Method of work: At each session, country notes containing factual information on the general orientation of economic plans, programmes and prospects concerning the longer-term development (growth and pattern) of national economies, including new activities in, and new features of, planning and projections, will be submitted by Governments and discussed with the view to identifying common long-term trends, policy issues and potentialities for international co-operation. A list of issues for discussion will be selected by the Senior Economic Advisers at each session based on the notes prepared by the Governments and by the secretariat.

cont.

11.1.2. Long-term economic prospects for the
ECE region

Description: Pursuant to Commission decision G (XXXII), the Senior Economic Advisers will consider recurrently the long-term economic prospects of the ECE region. Over-all long-term economic prospects will be elaborated possibly every five years. The preparation of the next perspectives will be based on deeper analyses of output, particularly industrial structures, and on contributions from other Principal Subsidiary Bodies in particular from the Committee on the Development of Trade through the preparation of long-term prospects in their specific sectors or areas.

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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Method of work: The impact of changes in industrial pattern on future economic development will be considered on the basis of a study prepared by the secretariat and on contributions made by Governments concerning their orientations for future growth pattern. To identify the interrelationship between economic growth and trade, a special meeting will be convened in close association with the Committee on the Development of Trade. Long-term projects carried out by other Principal Subsidiary Bodies will also be considered successively, either on the basis of notes prepared by the secretariat or through organization of joint meetings or seminars. The elaboration of tools, methods, including models for long-term projections will also be continued.

cont.

WORK AREA 11.2: SELECTED LONG-TERM ECONOMIC POLICIES
AND PROBLEMS

11.2.1. Long-term energy and basic products trends
in relation to long-term economic prospects
for the ECE Region

Description: The Senior Economic Advisers will continue to study long-term energy demand and supply trends, including macro-economic linkages involving energy prices, trade, investment and changes in demand and supply patterns. Long-term issues on the supply of and demand for basic materials will also be studied. In addition, they will further explore the relationship between economic growth, structural change and the demand and supply for energy and basic products.

Method of work: (a) The secretariat will report, in the course of 1979, on the results of energy projections with an ECE energy demand model and on related economic growth projections; (b) the structure of energy sector economic activity will be analysed, taking into account changes in prices and changes in investment and trade patterns within the ECE region; (c) an ECE Seminar on "Modelling Studies on Energy Conservation and its Impact on the Economy" will take place in Washington, D.C. (USA) during 16-19 October 1979 with the active participation of the Senior Economic Advisers; (d) exchanges of information and long-term perspectives should continue between the Senior Economic Advisers and related Principal Subsidiary Bodies, in particular the Electric Power, Coal and Gas Committees.

cont.

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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11.2.2. International factors in long term growth,
investment policies and international
co-operation

Description: In line with the increasing process of internationalization of production, the Senior Economic Advisers will consider the role of investment policies and other measures in shaping the future pattern of international economic relations.

Method of work: A Seminar on "Forms and orientations of international co-operation in relation to long-term growth pattern" will be organized, to be held in May 1979.

2

1980

WORK AREA 11.3: INSTRUMENTS AND METHODS FOR THE
ELABORATION OF NATIONAL PLANS,
PROGRAMMES AND PROJECTIONS

11.3.1. Methodology of models and systems of models

Description: As a follow-up to the 1970 and 1974 Seminars on the use of models and systems of models in planning and decision-making, the Senior Economic Advisers will continue their exchange of views between model builders, research workers and planners, over three or four years, whenever new developments in this field justify the organization of annual exchanges of bibliographical information on quantitative methods applied to economic planning and decision-making.

Method of work: A seminar on "Recently developed economic models and methodologies for planning complex development projects" will be organized in 1980. An annual report on "Quantitative methods and model building applied to economic planning and decision-making" is prepared by the secretariat on the basis of annual replies received from Governments and relevant research centres.

cont.

12. - STATISTICS

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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WORK AREA 12.1: REGIONAL STATISTICAL CO-OPERATION

12.1.1 Review of statistical work in the ECE region, including current ECE statistical work and work of other organizations in the ECE region

Description: Review of statistical work under the programmes of the Principal Subsidiary Bodies of ECE, other statistical work of the secretariat; review of statistical work of the inter-governmental organizations in the ECE region, with a view to promoting co-ordination of statistical activities.

Methods of work: Preparation of reports by the secretariat on the statistical work of ECE for consideration at plenary sessions; preparation of reports by the inter-governmental organizations active in the ECE region on their statistical work, for consideration at plenary sessions.

cont.

12.1.2 Promotion of co-ordination of the statistical activities in Europe of inter-governmental organizations

Description: Promotion of co-ordination of work on statistical standards, statistical inquiries and other statistical activities of inter-governmental organizations in the ECE region with a view to achieving greater uniformity in concepts and definitions and to reducing to a minimum the burden on national statistical offices.

Methods of work: Co-operation with inter-governmental organizations active in the ECE region on statistical projects of common interest through inter-secretariat consultations and the conduct of joint projects.

cont.

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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12.1.3 Statistical support for ECE studies and projects

Description: Development and improvement of the statistical basis for the work of ECE and its Principal Subsidiary Bodies; provision of Statistical information for ECE studies and projects.

Methods of work: Consideration at plenary sessions of questions concerning the development and improvement of the statistical basis for the work of ECE: see other items in the programme of work; provision of statistical data for ECE studies and projects (by national statistical offices).

cont.

12.1.4 Regional contribution and support to the work of the United Nations Statistical Commission

Description: Participation in world-wide projects undertaken by the UN Statistical Commission, with particular reference to the circumstances and requirements in the ECE region.

Methods of work: Consideration at plenary sessions of matters relating to its participation in the work of the UN Statistical Commission: the specific projects and objectives and the methods by which they are carried out are described in the relevant items of the programme of work.

cont.

12.1.5 Statistical problems of special interest to the member countries of the ECE which are developing from the economic point of view

Description: Support for UNDP regional and inter-regional projects in statistics, statistical information systems, use of computers for statistical purposes and training in use of computers.

Methods of work: Consideration at plenary sessions of proposals and support for statistical projects of special interest to the member countries of the ECE region which are developing from the economic point of view.

cont.

Estimated duration (in years) Estimated termination year

WORK AREA 12.2: ORGANIZATION AND OPERATION OF STATISTICAL SERVICES

12.2.1 Use of computers for statistical purposes and design and development of statistical information systems

Description: Study of important problems, exchange of national experience and promotion of international co-operation in these fields.

Methods of work: Preparatory work for ISIS '78: Research by countries participating in the co-operative research programme and preparation of papers on the five subjects selected for the next stage of the programme.

1 1978

Preparatory work for the sixteenth session of the Working Party on EDP: (a) further round of national reports on generalized computer programs; (b) preparation of a draft directory of generalized computer programs; (c) preparation of a progress report by a group of rapporteurs on computer aspects of the use of registers in statistical offices; (d) preparation of national reports on new developments and experiences in the field of automated data banks; (e) preparation of national reports on the use of advanced techniques for the presentation of computerized statistical output; (f) preparation of national reports on five subjects identified by the Working Party as part of the major topic: "The Interdependence of Trends and Requirements in Computing Technology and Statistical Services"; sixteenth session of the Working Party on the subjects indicated (1978/79).

1 1979

Preparatory work for later sessions of the Working Party: preparation of reports on: (a) the impact of mass storage devices on statistical data processing; (b) the use of APL for statistical work; (c) the precision of data in statistical data files; (d) geographical co-ordinates in statistical processing; and (e) disclosure techniques.

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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Preparatory work for later ISIS Seminars: research by countries participating in the co-operative research programme and preparation of papers on the topics selected for further stages of the programme.

12.2.2 Methods of improving operational techniques of producing official statistics

Description: Study of problems of quality, accuracy and timeliness and similar methodological questions in official statistics and of ways of solving them.

Methods of work: (i) Consideration at the twenty-seventh plenary session of the following topics:

(1) Human resources in overall statistical services (qualification of staff at date of recruitment as compared to functional needs; practices and plans in the field of career and development programmes; organizational options for training and their costs; the effect of special measures: job rotation - establishment of teams - training of managerial staff), after (a) preparation of background information, by countries wishing to do so, for submission through the secretariat to the authors of discussion papers (by November 1978); (b) preparation of discussion papers by the German Democratic Republic, the Ukrainian SSR, the United Kingdom and Yugoslavia (by mid-February, 1979);

(2) Determination and implementation of statistical priorities (innovative approaches to the solution of the problem), after (a) preparation of reports by Canada, Finland and the USSR (by October 1978); (b) circulation of the reports to national statistical offices; (c) submission of country comments on the applicability of the methods described in the reports to their national circumstances (by December 1978); (d) preparation of a synthesis report of country comments by another country (by April 1979).

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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(ii) Consideration at the twenty-eighth plenary session of the following topics:

(1) Problems arising in the integration of modern data processing techniques into statistical services, including the identification of developments requiring top-level decisions, after (a) collection of information about such problems encountered in national statistical offices, by the secretariat; (b) consideration at the twenty-seventh plenary session of the questions to be discussed.

(2) The measurement of and reporting on the quality of statistics and the balancing of quality against timeliness, after (a) collection of information on recent developments in national practices, by the secretariat; (b) consideration at the twenty-seventh plenary session of the questions to be discussed.

2 · · 1980

(iii) Further study of problems relating to household surveys: the results of evaluation studies; development of models for use in estimation; derivation of time series; linkage of data from different surveys; interdependencies of survey data and other statistics; and implications of the methodology of surveys for the adequate use of survey results in the consideration of policy decisions (exchange of information; the need for a further meeting to be considered later); preparation of guidelines for the presentation of the quality of survey results (with the assistance of interested countries).

3 1981

WORK AREA 12.3: DEVELOPMENT AND HARMONIZATION OF ECONOMIC STATISTICS

12.3.1 Development and linking of SNA and MPS national accounts and balances systems

Description: Further development of the systems of national accounts and balances: application and review of implementation of the systems; preparation of a framework derived from the systems to serve as a basis for harmonizing and coordinating existing international programmes,

	<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
identifying areas not yet covered by international recommendations and drawing up statistical programmes for these areas; consideration of the problems of co-ordinating statistics at the national level.		

Methods of work: Continuation of the review of SNA; study of particular subjects relevant to the review (to be considered at the twenty-seventh plenary session); meeting to consider the progress made in the review and to examine proposals for clarification, amendments and extension of SNA arising from the review (1979/80).

3	1981
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Continuation of the review of MPS and further study of SNA/MPS links; testing of the conceptual framework for inter-system comparisons in terms of actual figures (1978/79); further development of the conceptual framework and extension to related areas, e.g. balance sheets.

3	1981
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Completion of the paper on the co-ordination of economic statistics with the national accounts and balances; circulation of the paper for comments; consideration of the paper by an informal meeting of national rapporteurs; preparation of a revised version of the paper for consideration at the twenty-seventh plenary session.

1	1979
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12.3.2 Promotion of publication and dissemination of internationally comparable statistics on production, national income and productivity

Description: Promotion of bilateral and multi-lateral comparisons of corresponding national accounting aggregates, productivity, etc.

12.3.2.1 Comparison of relative income differences within the population

Description: Study of the methodology of international comparisons of relative income differences within the population.

	<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
<u>Methods of work:</u> Preparation of a paper on the methodological conclusions to be drawn from the work so far carried out in the context of this project; consideration of this paper at an informal meeting of the participating countries (and other interested countries).	1	1979

12.3.2.2 Other international comparisons

Description: Comparison within the ICP framework for the European region, comparison of consumption and capital formation (Austria/Poland) and other comparisons of corresponding aggregates.

<u>Methods of work:</u> Preparation of a paper summarizing the methods employed and results achieved in past bilateral comparisons under the Conference's work programme (by the secretariat).	1	1978
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Completion of the Austria/Poland comparison of consumption and capital formation.	1	1979
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Preparation for a comparison within the ICP framework for the European region; informal meeting of interested countries, international organizations and ICP staff members to agree on the programme for the European comparison (spring 1979).	2	1980
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Conduct of bilateral comparisons of basic economic aggregates and analysis of the results concerning levels, structures and prices; conduct of bilateral comparisons of levels of productivity and analysis of the results; and comparisons not involving the recalculation of data into a common price system.

cont.

12.3.3 Development and harmonization of statistical nomenclatures relating to economic activities and goods and services

Description: Participation in the work of the Statistical Commission on the preparation of international classifications relating to statistical activities and goods and services; harmonization of UN and CMEA classifications in these fields.

Estimated Estimated
duration termination
(in years) year

12.3.3.2 Conversion key between UN and CMEA
standard classifications of economic
activities

Description: Study of the correspondence and
development of a conversion key between the ISIC
and the CMEA classifications of economic activities.

Methods of work: A study of the points of
correspondence and differences between the ISIC and
the CMEA classifications of economic activities;
development of conversion keys between the
corresponding classifications; testing of the
conversion keys in terms of actual figures (by the
secretariat in consultation with the Secretariat of
CMEA, with the assistance of national rapporteurs
and informal meetings as required).

4 1982

12.3.3.3 Conversion key between UN and CMEA
standard classifications of goods and
services

Description: Study of the correspondence and
development of a conversion key between the UN and
CMEA classifications of goods and services.

Methods of work: Study of the points of
correspondence and differences between UN and CMEA
classifications of goods and services; develop-
ment of conversion keys between the corresponding
classifications; testing of the conversion keys in
terms of actual figures (by the secretariat in
consultation with the Secretariat of CMEA, with the
assistance of national rapporteurs and informal
meetings as required).

4 1982

12.3.4 Foreign trade statistics

Description: Study of selected subjects in the
compilation of foreign trade statistics and their
international comparability.

12.3.4.1 Conversion key SITC/SFTC

Description: Preparation of a detailed corres-
pondence table between the SITC and the SFTC;
development, on the basis of the correspondence

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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table, of an operational key for the conversion of data classified according to the SFTC into SITC categories (and vice versa).

Methods of work: Circulation of the revised correspondence table and draft conversion key between the SITC, Rev. 2, and the SFTC for comments; test of the draft key in terms of actual statistics (by Austria and Hungary); a second consultation to finalize the key; and development of a conversion key for the conversion of SITC data into SFTC categories.

2	1980
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12.3.4.2 Price and quantity statistics

Description: Development and improvement of statistical measures of prices and quantities in foreign trade.

Methods of work: Analysis of reports on national practices with regard to the measurement of prices and quantities in foreign trade (by the secretariat); meeting on the subject (1979).

2	1980
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12.3.4.3 Country of origin and destination

Description: Study of the problems involved in the identification of country of origin and destination.

Methods of work: Participation in the work of the Statistical Commission on definitional and conceptual problems in foreign trade statistics; further work to be considered in the light of the decisions of the UN Statistical Commission concerning the revision of the international recommendations for foreign trade statistics.

2	1980
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12.3.5 Price and quantity statistics

Description: Study of problems in particular areas of price and quantity statistics in relation to the system of price and quantity statistics.

12.3.5.2 Statistics of consumer prices

Description: Study of the methodological problems involved in the compilation of statistics of consumer prices (jointly with ILO).

	<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
<p><u>Methods of work:</u> Continuation of work on selected aspects of statistics of consumer prices, notably treatment of durable goods, housing and credit sales; classification of consumer goods and services; indices net of indirect taxes; problems of seasonality (preparation of papers by national statistical offices and the ILO and ECE secretariats, informal meetings on particular aspects); meeting on statistics of consumer prices (or on price and quantity measures in services) in 1979/1980.</p>	3	1981
<p>12.3.5.3 Price and quantity measures in services</p>		
<p><u>Description:</u> Study of the methodological problems involved in the measurement of prices and quantities in services.</p>		
<p><u>Methods of work:</u> Preparation of a paper, or papers, on problems of price measurement in services (or particular areas of services); meeting on the subject (or on statistics of consumer prices) in 1979/1980.</p>		
	2	1980
<p>12.3.6 <u>Public sector statistics (including State budget)</u></p>		
<p><u>Description:</u> Preparation of a programme of public sector statistics related to the systems of national accounts and balances and the System of Social and Demographic Statistics, and covering the wide range of data needed for the analysis of the activities and policies of the government.</p>		
<p><u>Methods of work:</u> Preparation of proposals concerning the parts of public sector for which links between SNA and MPS might be useful and for adjustment tables in respect of the relevant aggregates (by the secretariat, in consultation with the CMEA Secretariat); participation in further work on the preparation of international guidelines for public sector statistics and further meeting on the subject when required.</p>		
	1	1979

	<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
12.3.7 <u>Other selected subjects in economic statistics</u>		
<u>Description:</u> Preparation and revision of inter- national recommendations in specific areas of economic statistics in relation to the systems of national accounts and balances.		
12.3.7.1 Agricultural statistics		
<u>Description:</u> Improvement and development of food and agricultural statistics (jointly with FAO and the ECE Committee on Agricultural Problems).		
<u>Methods of work:</u> Preparation of a European Hand- book of Economic Accounts for Agriculture covering both SNA and MPS types of accounts and links between them, presenting the set-up of the whole system, but with detailed presentation only of the commodity, production and capital formation accounts and corresponding balances (by the joint secretariats); further work on income and outlay accounts and capital formation accounts (by the joint secretariats).		
	1	1978
Review and updating of earlier recommendations on statistics and balances for meat and milk; meeting on the subject.		
	1	1979
Development of production and utilization statistics for other products, with priority for sugar beets and sugar, oil seeds (including oil and oil-cakes), and possibly followed by: potatoes, tobacco and fibre crops; informal meetings on these subjects as required.		
	2	1980
Study of problems involved in statistics of the agricultural labour force and labour input; the need for and timing of a meeting on this subject to be considered later.		
	1	1979
Preparation of a draft programme of statistics of food consumption and nutrition; circulation of the draft programme for comments; meeting to consider the draft programme.		
	2	1980

	<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
Study of methodological questions relating to farm book-keeping data and the possibility of their harmonization with other agricultural statistics; the need for and timing of a meeting on this subject to be considered later.	2	1981
Preparation of a glossary of terms used in agricultural statistics in the working languages of the region.	3	1982
Overall review of agricultural statistics in the light of developments of data requirements; preparation of a draft programme, serving as a framework for the systematic presentation of the data requirements; meeting to consider the draft programme.	4	1983

12.3.7.2 General energy statistics

Description: Elaboration of a system of energy statistics serving as a framework for the development and harmonization of statistics on energy needed for national and international purposes.

Methods of work: Continuation of work on various aspects of an overall system of energy statistics; participation in the work on energy statistics of the United Nations Statistical Commission; consideration of the statistical implications of the work of ECE in the field of energy; collection of data for the compilation of a provisional set of overall energy balances; review of the provisional version of the overall energy balances; review of format and contents of the Annual Bulletin of General Energy Statistics and related aspects of the overall publication programme of ECE in the field of energy statistics; further meeting on general energy statistics in 1978/79.

2 1979

12.3.7.4 Statistics of science and technology

Description: Development and improvement of statistics of science and technology; co-ordination of statistics of science and technology with the systems of national accounts and balances (jointly with UNESCO and the Senior Advisers to ECE Governments on Science and Technology).

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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Methods of work: Follow-up work on subjects discussed at the 1976 Seminar on Statistics of Science and Technology: (i) co-ordination of science statistics with the systems of national accounts and balances (by the ECE secretariat in co-operation with UNESCO, with the assistance of national rapporteurs, by correspondence and informal meetings as required); (ii) study of the work on science statistics carried out within the framework of the CMEA (by the UNESCO secretariat in co-operation with the Secretariat of the CMEA); small meeting of experts, if required; (iii) statistics on the transfer of technology (by the ECE secretariat, possibly with the assistance of national rapporteurs): preparatory work for and meeting on transfer of technology to consider the availability of statistics and their interpretation and to make recommendations on the suitability of present and on the possible need for new indicators. 1-2 1980

Preparatory work for the fourth joint meeting on statistics of science and technology on the following subjects: (i) measurement of the economic effects resulting from the implementation of the results of R and D; (ii) statistics on scientific and technological activities related to R and D; and (iii) measurement of the financial resources for R and D in the productive sector (by the secretariats of UNESCO and ECE, with the assistance of national rapporteurs; and possibly workshops to be convened by UNESCO); meeting on the subjects mentioned (1979 or beginning of 1980). 2 1980

12.3.7.5 Statistics of tourism

Description: Preparation of international guidelines for statistics of tourism.

Methods of work: Further meeting on statistics of international and domestic tourism, if required (to be considered later when sufficient progress has been made in the preparation of the manual on statistics of tourism by WTC). 2 1980

12.3.7.6 Enterprise statistics

Description: Development of statistics for enterprise-type statistical units.

<u>Estimated duration (in years)</u>	<u>Estimated termination (year)</u>
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Methods of work: Completion of the comparative analysis of country practices on enterprise statistics (by the UN Statistical Office); the secretariat to arrange for the preparation of a follow-up report to document CES/346; informal meeting of national rapporteurs to consider the results of the comparative analysis and the follow-up paper, and to make recommendations concerning the scope and arrangements for further work on enterprise statistics.

1	1979
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12.3.7.7 Statistics of fixed capital formation and stocks and related aspects of statistics of profits

Description: Study of problems involved in the collection of statistics on fixed capital formation, stocks and related aspects of profits.

Methods of work: Preparatory work for and a meeting on this subject with the following terms of reference: (i) review of concepts and methods of collecting and compiling data on gross and net fixed capital formation and depreciation; (ii) review of methods of evaluating changes in stocks; (iii) concepts and methods used for estimating profits and their relationship with concepts and methods used in estimates of capital formation from related sources and, in so far as time permits, (iv) estimates of fixed capital formation and stocks at constant prices (1978/79).

1	1979
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WORK AREA 12.4: DEVELOPMENT AND HARMONIZATION OF SOCIAL AND DEMOGRAPHIC STATISTICS

12.4.1 Framework for the integration of social and demographic statistics (FSDS)

Description: Participation in the work of the UN Statistical Commission on the elaboration of a framework for the integration of social and demographic statistics; elaboration of the common concepts, definitions and classifications of the framework, and links among the different fields of social and demographic statistics and with the systems of national accounts and balances, participation in the work of the UN Statistical Commission on social indicators; and work on related subjects.

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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Methods of work: Completion of the work of the groups of rapporteurs on links among the different fields of the framework and on the active sequence; continuation of the work on links between the framework and the systems of national accounts and balances; preparation of a paper providing a general orientation on the work on the FSDS for submission to specialized meetings in the field of social and demographic statistics (by UNSO and the secretariat); continuation of the work on concepts, definitions and classifications (elaboration of key classifications), preparation of papers by national rapporteurs, international organizations or the secretariat on: (i) treatment of time in the FSDS (Poland, UNSO); (ii) compilation of statistics for client groups (United Kingdom); (iii) statistics for the study of the socio-economic structure of the population and mobility (preliminary paper on the orientation of work on this subject, by Hungary in collaboration with Italy, Poland and Portugal); (iv) methods of integration of social and demographic statistics (UNSO and supporting note by the United States); (v) an account of the work of the common development efforts relating to social indicators being undertaken by the OECD (OECD Secretariat); meeting of the Working Party to consider these subjects.

1	1979
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Further work on this project to be considered later in the light of the progress made and experience gained.

2	1980
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12.4.2 Development and harmonization of statistical nomenclatures in the field of social and demographic statistics

Description: Participation in reviews of classifications in the field of social and demographic statistics; preparation of new classifications in fields in which they do not exist; study of the similarities and differences between the UN and CMEA classifications in the field of social and demographic statistics, and the preparation of conversion keys where required.

	<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
<u>Methods of work:</u> A comparative study of UN and CMEA classifications in the field of social and demographic statistics; preparation of conversion keys in areas where they are needed (by the secretariat, in co-operation with the Secretariat of CMEA and with the assistance of national rapporteurs).	1	1980
12.4.3 <u>Population and housing censuses</u>		
<u>Description:</u> Review of implementation of the recommendations for the 1980 population and housing censuses in the ECE region; preparatory work for the 1990 census recommendations.		
<u>Methods of work:</u> Formulation of proposals concerning the publication of the 1980 census data for consideration at the twenty-seventh plenary session (secretariat); preparatory work for and meeting on the evaluation of the census results and methodology (1983).		
	5	1983
12.4.4 <u>Selected problems in social statistics</u>		
<u>Description:</u> Preparation and revision of international recommendations in specific areas of social statistics; development of the relevant fields of the framework for social and demographic statistics.		
12.4.4.1 Manpower statistics		
<u>Description:</u> Elaboration of the objectives and contents of the field of-earning activities of the framework for the integration of social and demographic statistics and links between it and other fields and with the systems of national accounts and balances; elaboration of existing standards and development of new standards for the statistics needed for meeting these requirements (jointly with ILO).		
<u>Methods of work:</u> Preparatory work for and a meeting on manpower statistics to (f) review current national practices in compiling manpower statistics from various sources and plans for developing these statistics to meet new analytical needs;		

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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(ii) assess the extent to which existing international recommendations may need to be elaborated and new recommendations developed; (iii) exchange views on problems and techniques of harmonizing manpower statistics from different sources; and (iv) consider further work needed on the integration of manpower statistics with other social and demographic statistics and the improvement of links with the national accounts and balances (1979); further work to be considered in the light of the results of the meeting.

1	1979
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12.4.4.2 Health statistics

Description: Elaboration of the objectives and contents of the health field of the framework for the integration of social and demographic statistics and the links between it and other fields and with the systems of national accounts and balances; elaboration of existing standards and development of new standards for the statistics needed for meeting these requirements (jointly with WHO).

Methods of work: (i) Study of the possibilities of drawing up a classification of impairments and handicaps suitable for use in classifying data from household surveys and compatible with the more detailed classification issued for trial purposes by WHO (WHO, jointly with UN); (ii) preparation of national reports on linking population-based data and institution-based data; (iii) comparative study of social indicators in the field of health compiled at the national level (Regional Office for Europe of WHO); (iv) study of problems relating to health accounts, including the classifications by kind of activity and by objectives to be used in such accounts (small group of interested countries); (v) consultations of small groups of interested countries to carry out preparatory work on the above subjects as and when required; (vi) meeting to consider the results of work on the above subjects (timing to be considered later in the light of the progress made).

3	1981
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<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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12.4.4.3 Statistics of education

Description: Elaboration of the objectives and contents of the educational field of the framework for the integration of social and demographic statistics and the links between it and other fields and with the systems of national accounts and balances; elaboration of existing standards and development of new standards for the statistics needed for meeting these requirements (jointly with UNESCO).

Methods of work: Further study and international consultations on the general aspects and specific problems in the application of ISCED and the relation of statistics based on ISCED and the FSDS as a whole; continuation of the study on availability of social indicators in the field of education, extension of the study to all countries in the ECE region and analysis of national and international data available in terms of the concepts underlying the indicators and the purposes which the indicators are designed to serve (by UNESCO); further work on economic accounts for education, when further progress has been made in the work on social service accounts as a whole; further meeting on statistics of education to review the results of the work on these subjects.

2

1980

12.4.4.4 Cultural statistics

Description: Development and improvement of cultural statistics; elaboration of the objectives and contents of the leisure field of the framework for the integration of social and demographic statistics and the links between it and other fields and with the systems of national accounts and balances; elaboration of existing standards and the development of new standards for the statistics needed for meeting these requirements (jointly with UNESCO).

Methods of work: Preparation of a revised version of the paper on the scope and coverage of a framework for a system of cultural statistics (by UNESCO); second meeting on cultural statistics (1978/79); development of the contents of the system; third meeting on the system as a whole, if required.

2

1980

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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12.4.4.5 Housing statistics

Description: Elaboration of the objectives and contents of the housing field of the framework for social and demographic statistics and the links between it and other fields and with the systems of national accounts and balances; elaboration of existing standards and development of new standards for the statistics needed for meeting these requirements; improvement and further development of construction statistics and planning statistics (jointly with the ECE Committee on Housing, Building and Planning).

Methods of work: (i) Housing statistics: review of the part of the guidelines on social indicators relating to housing; review of developments in the field of housing sample surveys; review of the European Programme for Current Housing Statistics and the Annual Bulletin of Housing and Building Statistics for Europe; (ii) construction statistics: review of the extent to which the UN Yearbook of Construction Statistics meets the needs of countries in the ECE region in respect of its contents and timeliness; (iii) planning statistics: statistics for physical planning, including urban planning (when further progress has been made by users in defining their requirements); (iv) meeting on these subjects when sufficient progress has been made on the preparatory work.

3	1981
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12.4.4.6 Statistics of crime and justice

Description: Study of requirements for statistics of crime and justice in relation to the relevant field of the framework for the integration of social and demographic statistics.

Methods of work: Preparation of a study on the requirements with regard to statistics of crime and justice; a meeting on this subject when resources permit.

2	1980
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Estimated Estimated
duration termination
(in years) year

12.4.5 Selected problems in demographic
statistics

Description: Preparation and review of international recommendations in specific areas of demographic statistics; development of the demographic field of the framework for the integration of social and demographic statistics.

12.4.5.1 Migration statistics

Description: Participation in the work of the UN Statistical Commission on the preparation of revised international recommendations for statistics of international migration and development of guidelines for statistics of internal migration; improvement of migration statistics in general.

Methods of work: Meeting on migration statistics in 1978/79 to (i) review the application of the revised recommendations for statistics of international migration; (ii) consider the UNSO paper on statistics of internal migration; and (iii) consider the results of the further analysis of differences between data reported by countries of immigration and countries of emigration and possible action to be taken with regard to a regular exchange of data.

1 1979

12.4.5.3 Co-ordination of demographic statistics
within the FSDS

Description: Elaboration of the objectives and contents of the demographic field of the framework for the integration of social and demographic statistics and the links between it and other subsystems and with the systems of national accounts and balances; elaboration of existing standards and development of new standards for the statistics needed for meeting these requirements.

Methods of work: Reconsideration of the terms of reference for the meeting on the co-ordination of demographic statistics within the framework for the integration of social and demographic statistics; preparatory work for (by the secretariat) and meeting on this subject (1979/1980).

2 1980

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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12.4.5.5 Demographic projections

Description: Preparation of recommendations for improving the projections of households and families compiled by ECE countries and promoting their comparability.

Methods of work: Preparatory work for (by the secretariat) and meeting on projections of households and families.

1	1980
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WORK AREA 12.5: DEVELOPMENT AND HARMONIZATION OF ENVIRONMENTAL AND RELATED STATISTICS

12.5.1 Environmental statistics

Description: Study of the statistical requirements for environmental studies and policies; participation in the work of the UN Statistical Commission on the development of a system of environmental statistics; elaboration of the concepts, definitions and classifications to be used for the study of particular environmental phenomena and for the purposes of the system as a whole; study of methodological questions and problems of data collection in particular areas of environmental statistics (jointly with the Senior Advisers to ECE Governments on Environmental Problems).

Methods of work:

(a) Frameworks for the co-ordination and development of environmental statistics: Comparative survey of national compilations of environmental statistics (secretariat) (1978/79); further consideration of the conceptual approaches to the development of frameworks, including links with social and economic statistics (secretariat, with the assistance of national rapporteurs); meeting on the subject, if required.

3	1981
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(b) Statistical requirements and development of concepts, definitions and classifications in particular areas: Statistics of land use (see project 12.5.4 below); concepts, definitions and

<u>Estimated duration (in years)</u>	<u>Estimated termination (year)</u>
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classifications in statistics on (i) water use; (ii) quality of air and water; (iii) flora and fauna (secretariat, with the assistance of national rapporteurs) (1981 and 1982); statistical implications of ongoing work in the field of long-range transport of air pollutants (secretariat, with the assistance of national rapporteurs); statistics on costs of environmental protection (to be studied in the context of further work on the national accounts and balances); review of the results of the work of the ECE Task Force on indicators on environmental quality. Meetings on particular questions, if required.

5	1983
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(c) Methodological tools for use in the collection and compilation of environmental statistics: Study of (i) sampling techniques over time and space; (ii) problems of aggregation of information obtained at large numbers of local measurement sites (secretariat, with the assistance of national rapporteurs); seminar on methodological questions (1979/1980).

2	1980
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12.5.3 Regional statistics

Description: Formulation of guidelines concerning the various types of regional statistics needed for promoting balanced economic and social development of different regions of a country and accelerating the growth of less favoured regions.

Methods of work: Inter-secretariat consultation between international organizations on regional statistics; preparatory work for (by the secretariat) and meeting on regional statistics.

3	1981
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12.5.4 Statistics of land use

Description. Elaboration of concepts, definitions and classifications needed in statistics for land use studies and policies; consideration of the possibilities, and implications for definitions and classifications, of the ecological mapping approach and of remote-sensing techniques.

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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Methods of work: Preparation of a summary and comparative analysis of national practices in the field of land use statistics and the classification of land use (by the secretariat); preparation of papers on methods used in the ecological mapping approach and on the applicability of remote-sensing techniques for the collection of information on land use (by the secretariat, with the assistance of national rapporteurs); informal meeting(s) to consider these papers (1979); review of the papers and preparation of further material for a meeting on land use statistics (1979/1980). Further work to be considered later, in the light of progress made in the work, and on environmental statistics in general.

3

1981

13. - STEEL

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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WORK AREA 13.1: MEDIUM- AND LONG-TERM PERSPECTIVES

13.1.1. Long-term perspectives for the iron and steel industry

Description: At its annual sessions the Committee will continue to consider long-term prospects for the steel industry, the demand for steel products and the raw material and energy base for the steel industry, with a view to selecting specific issues for detailed studies.

Method of work: The Committee will consider these problems on the basis of studies and background papers, prepared periodically by the secretariat and/or by governmental rapporteurs, on specific aspects of long-term problems as defined by the Committee. A meeting of Experts on Forecasting Methods to consider the possibility of devising a methodology for projection work on the steel industry will be convened when the Committee decides it to be necessary.

cont.

13.1.2. Co-operation with Senior Economic Advisers to ECE Governments on the Overall Economic Perspective for the ECE Region up to 1990

Description: The Steel Committee will consider and comment upon the Overall Economic Perspective as elaborated by the Senior Economic Advisers to ECE Governments and will make available to the Senior Economic Advisers the results of its relevant work.

Method of work: The secretariat will prepare and submit to the Committee the documentation which will be needed for this purpose and will assist the Committee in carrying out its work on this project.

2

1980

Estimated duration (in years)	Estimated termination year
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WORK AREA 13.2: CURRENT DEVELOPMENTS AND PROSPECTS,
 INCLUDING INTERNATIONAL TRADE

13.2.1. Short-term trends and problems in the steel
 industry and the steel market

Description: The Committee will, at its annual session, discuss short-term trends and problems in the steel industry and the steel markets. It will examine, in particular, major trends in production, consumption and trade in steel and steel making raw materials, trends in investment and prices as well as any other key questions which arise during the course of the year.

Method of work: The secretariat will prepare, in the first half of each year, a provisional version of an annual review as a basis for discussion in June by the Steel Committee's Working Party on the Steel Market. After consideration by the Working Party the review will be published by the secretariat.

cont.

WORK AREA 13.3: SELECTED ECONOMIC AND TECHNOLOGICAL
 PROBLEMS

13.3.1. The use of light-weight sections in construction

Description: The Committee will examine problems relating to economic and technical aspects of the application of light-weight sections in construction.

Method of work: Will be established by the Committee when it is decided to initiate this project

2	1983
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13.3.2. Raw materials for steel making

13.3.2.1. Utilization of low-grade iron ores

Description: Problems of efficiency of utilization of ores and technological use, resources of iron ores including low magnetic ores, will be considered by the Committee.

Method of work: To be decided by the Steel Committee at a later date.

2	1983
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13.3.2.2. Production and supply of metallurgical coke

Description: The Committee will examine problems relating to new technologies, reduction of specific coke consumption in blast furnaces, marketing, distribution, pricing and environmental aspects.

	<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
<p><u>Method of work:</u> An ad hoc Meeting of Experts will be held in February 1979 to determine the outline of the study and to elaborate details with regard to method of work. The preliminary discussion will be based on countries' comments submitted to the secretariat. A group of experts will guide the secretariat to elaborate the study. It will also design Government rapporteurs to assist the secretariat in drafting of the study.</p>	2	1980
<p>13.3.3. <u>Economic problems related to the creation of steel plants using direct reduction</u></p>		
<p><u>Description:</u> The Committee will consider in which way this topic will be analysed, taking into account the results of the Bucharest Seminar, 1976.</p>		
<p><u>Method of work:</u> Dependent on the definition of the topic.</p>	2	1981
<p>13.3.4. <u>Steel use in public works, infrastructure and construction</u></p>		
<p><u>Description:</u> This will be defined in detail by the Preparatory Meeting.</p>		
<p><u>Method of work:</u> The seminar on this subject will be held in Luxembourg in 1979. The Preparatory Meeting for the Seminar will be held on 15-16 February 1978.</p>	1	1979
<p>13.3.5. <u>The use of steel in shipyards</u> (The precise title will be agreed at the Preparatory Meeting scheduled for 1979)</p>		
<p><u>Description:</u> The Committee will examine the techno-economic aspects of steel use in the shipbuilding industry; questions referring to the application of steel according to products and their quality will be examined. Past trends of steel demand will be analysed and an attempt will be undertaken to set out future tendencies.</p>		
<p><u>Method of work:</u> A seminar dealing with this subject will be held in Poland in 1980. The Preparatory Meeting for this seminar will be convened in February 1979.</p>	1	1980

Estimated duration (in years)	Estimated termination year
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WORK AREA 13.4: ENVIRONMENTAL AND RESOURCE-SAVING PROBLEMS

13.4.1. Low-waste and non-waste technology in the iron and steel industry

Description: The Committee will examine the salient problems related to low-waste and non-waste technology in the iron and steel industry, guided by countries' comments and suggestions. The purpose of the study will be to investigate the possibilities and limitations of industrial operations taking into account all relevant waste problems. The Committee will also closely co-operate on this topic with Senior Advisers to ECE Governments on Environmental Problems.

Method of work: Under the guidance of a group of experts, the study will be prepared by the secretariat, assisted by Government rapporteurs. An ad hoc Meeting of Experts is scheduled for June 1979.

2	1981
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13.4.2. Protection against air and water pollution arising in the iron and steel industry

Description: As a follow-up to its study on "Problems of Air and Water Pollution Arising in the Iron and Steel Industry", the Steel Committee will examine problems related to new and additional sources of pollution resulting from the employment of new processes, higher point concentration of pollutants and the progressing industrial expansion. Particular attention will be directed to abatement methods and cleaning facilities.

Method of work: The secretariat will keep the Committee informed of the relevant activity of the Senior Advisers to ECE Governments on Environmental Problems and will prepare the necessary documentation which the Committee will require for its consideration of these problems.

2	1982
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WORK AREA 13.5: INDUSTRIAL CO-OPERATION

13.5.1. Product specialization, including standardization in the iron and steel industry

Description: Will be defined in detail by a future session of the Steel Committee.

Method of work: Dependent on the detailed definition of the topic.

2	1982
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Estimated
duration
(in years)

Estimated
termination
year

WORK AREA 13.6: STATISTICS AND INFORMATION

13.6.1. Bulletins of steel statistics

Description: The Committee will guide the secretariat in its preparations and in the issue of statistical bulletins providing detailed yearly, quarterly and monthly steel statistics on a comparable basis.

Method of work: The Steel Committee's Working Party on Steel Statistics will examine, in co-operation with the Conference of European Statisticians, statistical and methodological questions relating to the development of the steel industry, assist the secretariat in establishing the methodology for current statistics, such as the method of calculation of apparent steel consumption, and promote the collection of steel statistics, paying particular attention to the improvement of statistics on stocks and actual consumption of steel. Bulletins will be issued annually and quarterly.

cont.

13.6.2. Bulletins on Statistics of World Trade in Steel

Description: The Committee will direct the secretariat in its preparations and in the issue of annual statistics of world trade in steel.

Method of work: The Steel Committee's Working Party on Steel Statistics, acting in co-operation with the Conference of European Statisticians, will consider any questions arising in this connexion.

cont.

13.6.3. Development of steel statistics

Description: New requirements for statistics will be considered by the Steel Committee at its annual sessions in connexion with its current work.

Method of work: This is considered by the Working Party on Steel Statistics in co-operation with the Conference of European Statisticians.

cont.

13.6.4. Statistics on Iron and Steel Scrap

Description: As a follow-up to its study on Iron and Steel Scrap, its significance and influence on further developments in the iron and steel industries, the Steel Committee will issue statistics on iron and steel scrap every two years.

Method of work: The secretariat will collect scrap statistics by means of the same questionnaire as that used for the study on Iron and Steel Scrap.

cont.

<u>Estimated</u> <u>duration</u> <u>(in years)</u>	<u>Estimated</u> <u>termination</u> <u>year</u>
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14.1.5. Trends, prospects and policies in southern Europe

Description: The forest and forest industry policy and environmental problems facing countries in the Mediterranean area will be reviewed in the light of the long-term outlook for their forest economies, as depicted in "European Timber Trends and Prospects, 1950 to 2000".

Method of work: An ad hoc meeting of experts will be convened in 1979, jointly with the FAO European Forestry Commission, to study the problems involved and to draw up recommendations for future action.

2

1979

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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WORK AREA 14.2: CURRENT MARKET DEVELOPMENT AND
SHORT-TERM PROSPECTS, INCLUDING
PROBLEMS RELATING TO INTERNATIONAL
TRADE

14.2.1. Review of production, trade, consumption and
prices of forest products

Description: The Committee will analyse on a continuous basis, short-term trends in the production, trade and prices of forest products and forecast short-term prospects, with a view to providing Governments and the forest products sector with accurate and up-to-date information and assessments, necessary for an orderly development of the supply-demand mechanism.

Method of work: The secretariat will prepare and publish annually a review of trends in forest products markets over the previous year, based on data supplied by Governments in connexion with project 14.5.1. The secretariat will present to the Committee's annual session the most recent available data on trends in the market for forest products, obtained from questionnaire returns, with a brief analysis of the situation. The Committee will review, at its annual session, short-term trends and prospects in the production, trade and prices of major forest products (sawn softwood, hardwoods, including tropical, pulpwood, coniferous logs and wood-based panels) on the basis of estimates prepared by delegations, for the current and following years. After the session the secretariat will prepare and publish an analysis of short-term market trends and prospects, based on the Committee's discussions.

cont.

14.2.2. Rationalization of the flow of forest products
from the forest to the consumer, including
transport and handling problems

Description: The Committee will review the distribution chain for forest products from the forest to the consumer, including transport and handling problems, and identify areas where it might recommend any action which it considers necessary to rationalize the flow of products and to increase efficiency with a view to facilitating international trade.

Method of work: A special lecture will be presented to the Committee's thirty-seventh session. The Committee will decide on further action in the light of the special lecture and with the guidance of its co-ordinator for transport and handling.

Estimated duration
(in years) Estimated termination
 year

14.2.3. Review of standardization activities

Description: The Committee will review at its annual session needs and priorities for standardization in the field of forest products as well as progress in its own standardization projects (14.2.4., 14.2.5., 14.2.6.). On the basis of this review, it will decide what activities it should undertake, with a view to facilitating international trade in forest products by removing non-tariff barriers, and to furthering the rational and economic use of wood.

Method of work: The Committee will base its annual review on a report, and if necessary, recommendations by its co-ordinator in the field of standardization

cont.

14.2.4. Standardization of stress grading of
 coniferous sawn timber

Description: The Committee will encourage the application of the ECE recommended standard by incorporation of its provisions into national standards, and undertake any further work necessary for the refinement of the recommended standard, with a view to ensuring the rational and economic use of, and to facilitating trade in, coniferous sawn timber.

Method of work: The Committee will convene an informal team of experts to collect information and make proposals for research programmes, quality control programmes and marking systems for stress graded coniferous sawnwood. The informal team will, among other things, draft a set of guidelines for countries developing quality control programmes. The Committee will organize training courses to exchange experience on the application of the recommended standard and for the training of those responsible for sawnwood grading. An ad hoc meeting will be convened after 1980 to review and, if necessary, update the recommended standard. (Work to be linked to project 14.2.5.).

4

1982

Estimated duration
(in years) Estimated termination
year

14.2.5. Standardization of finger-jointing in structural coniferous sawn timber

Description: The Committee will encourage the application of the ECE recommended standard on finger-jointing in structural coniferous sawn timber, notably by incorporation of its provisions into national standards, and undertake any further work necessary for the refinement of the recommended standard, with a view to ensuring the rational and economic use of, and to facilitating trade in, structural finger-jointed coniferous sawn timber.

Method of work: The Committee will convene an informal team of experts to collect information and make proposals about research programmes, quality control programmes and marking systems for finger-joints in structural coniferous sawnwood. The Committee will also organize seminars to exchange experience on the application of the recommended standard. An ad hoc meeting will be convened after 1980 to review and, if necessary, update the recommended standard. (Work to be linked to project 14.2.4.).

4 1982

14.2.6. Reduction of the number of standard dimensions of sawnwood entering international trade

Description: The Committee will formulate proposals for the reduction of the number of standard dimensions of sawnwood entering international trade, on the basis of ISO International Standard 3179 and in collaboration with ISO, with a view to facilitating international trade in sawnwood.

Method of work: The Committee will keep under review progress in the work being undertaken by other organizations with a view to collaborating in such work as and when it considers it appropriate.

3 1981

14.2.7. Classification and definitions of forest products

14.2.7.1. Revision of FAO Classification and Definitions of Forest Products

Description: The Joint FAO/ECE Working Party on Forest Economics and Statistics, in co-operation with the Conference of European Statisticians, will revise the FAO Classification and Definitions of Forest Products, with a view to ensuring that it is in harmony with international multi-sector classifications and definitions.

Method of work: An ad hoc meeting, under the auspices of the Joint Working Party, will revise the FAO Classification and Definitions of Forest Products (advance version published in 1973) when the revision of the major international classifications (e.g. SITC, BTN, ICGS) at present in progress, is complete.

2 1982

Estimated duration (in years)	Estimated termination year
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14.2.7.2. Classification and definitions of wood residues

Description: The Committee will harmonize national classifications and definitions of wood residues and of wood after its first use, with a view to facilitating international comparisons as well as analyses of the wood supply situation at the regional level.

Method of work: The Joint FAO/ECE Working Party on Forest Economics and Statistics will draw up a classification and definitions of wood residues at its twelfth session, on the basis of proposals prepared by the secretariat.

2	1980
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14.2.8. Economic and technical developments in finger-jointing of sawnwood

Description: The Committee will examine economic and technical developments in the production and utilization of finger-jointed sawnwood as a means of rationalizing the use of wood.

Method of work: A seminar will be held in Norway in 1980.

2	1980
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Estimated duration (in years)	Estimated termination year
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WORK AREA 14.3: SELECTED ECONOMIC, TECHNOLOGICAL AND
 MANAGERIAL PROBLEMS

14.3.1. Forest working techniques and training of
 forest workers

This project is covered by the activities of the Joint FAO/ECE/ILO Committee on Forest Working Techniques and Training of Forest Workers, which normally meets biennially (1980, 1982, 1984, etc.). Its task is to foster international collaboration on technical, economic and organizational aspects of forest working techniques and training of forest workers in logging and other forest operations; special attention is given to increasing the efficiency of labour, the reduction of the physical efforts of the worker, prevention of accidents, reduction of waste and the establishment of an adequate balance between technical, social and economic requirements and protection of the environment.

The project components are set out below under three main headings:

1. Silvicultural operations and general management aspects;
2. Wood harvesting and transport; and
3. Human aspects of forest operations.

14.3.1.1. Silvicultural operations and general management aspects

14.3.1.1.1. Development and use of machinery and methods for stand establishment, including planting stock and equipment

Description: The Joint Committee will promote the exchange of information and further rational regeneration methods which do not damage the forest ecosystem by regularly reviewing machines, techniques and planting stock applied in afforestation and reforestation, with emphasis on site clearing, soil preparation and planting.

Method of work: Seminars and/or study tours will be organized at 4-year intervals (1980, 1984, etc.). A seminar on afforestation and reforestation machines and techniques will be held in 1/ in 1980.

cont.

1/ Host country to be decided.

Estimated duration (in years)	Estimated termination year
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14.3.1.1.2. Forest fire prevention and control

Description: The Joint Committee will examine techniques and equipment used in forest fire control, as well as preventive measures, with a view to assisting Governments in these fields.

Method of work: A seminar will be held in Poland in 1980 and another in ... 1/ in 1983.

5	1983
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14.3.1.1.3. Methods of measurement of labour productivity

Description: The Joint Committee will review methods of assessing productivity of man and machines, and methods of measurement of standard times whereby to determine the relationship between changes in labour input and machine input and assess the effects and implications of replacing labour by machines.

Method of work: A team of specialists will discuss methods of measuring machine input in forestry operations, draw up proposals for future work by the Joint Committee in the field of labour productivity and submit them to the thirteenth session of the Joint Committee.

2	1980
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14.3.1.1.4. Planning and management of forest operations

Description: The Joint Committee will study methods of planning forest operations, especially in the long term, taking into account the impact of environmental and social constraints on the planning and method of work: It will also examine methods of assessing technical and economic accessibility of forest resources, so as to assist Governments in the planning and rational utilization of the resource.

Method of work: A seminar on (topic to be proposed by co-ordinators for decision by thirteenth session) will be held in 1/ in 1981, preceded by a preparatory meeting of a team of specialists.

2	1981
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1/ Host country to be decided.

Estimated duration (in years)	Estimated termination year
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14.3.1.1.5. Methods of payment

Description: The Joint Committee, in collaboration with the FAO/ECE Working Party on Forest Economics and Statistics, will review methods of payment of forest workers in order to show their effect on labour supply, productivity levels and rate of mechanization.

Method of work: A team of specialists will collect information and prepare a report, taking into account the findings of the study on labour statistics carried out by the FAO/ECE Working Party on Forest Economics and Statistics. The report will be submitted to a seminar on the effects of methods of payment on labour productivity and the conditions of work and life of forest workers to be held in 1/ in 1982.

2	1982
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14.3.1.1.6. Review of standardization activities in the field of forestry machinery

Description: The Joint Committee will keep under review standardization activities in the field of forest machinery to assist countries in the development and safety in use of such equipment.

Method of work: The Joint Committee will review at each session, on the basis of a report which ISO should be invited to submit, standardization work being carried out, and will maintain active co-operation with the responsible ISO sub-committee.

cont.

14.3.1.1.7. Standardization of concepts and terms used by the Joint Committee

Description: The Joint Committee will regularly review the definitions of currently used technical and economic concepts and terms with a view to facilitating exchange of information on an international level during its meetings and on other occasions.

Method of work: The co-ordinators and/or teams leaders will prepare, with the assistance of the secretariat, a limited list of basic concepts and terms in the three official languages for each of the seminars convened by the Joint Committee, in order to ease communication during the meeting and to have them discussed, approved and then disseminated within the framework of the Joint Committee.

cont.

1/ Host country to be decided.

Estimated duration
(in years) Estimated termination
 year

14.3.1.2. Wood harvesting and transport

14.3.1.2.1. Development and use of logging machinery

Description: The Joint Committee will keep under review trends and prospects in the development and use of logging machinery taking into account specific conditions and cost/price relationships so as to encourage rational logging methods in flat, hilly and mountainous regions from the economic, ergonomic and environmental points of view.

Method of work: Seminars on selected items will be held at intervals of not more than 2 years: in 1979, in France on mechanization and techniques of thinning operations; in 1981, in the German Democratic Republic on silvicultural, technological, economic and other problems connected with the mechanization of thinning operations.

cont.

14.3.1.2.2. Maintenance of forest machinery

Description: The Joint Committee will promote the exchange of information on systems of maintenance of forest machinery, and further the rational use of such machines.

Method of work: A seminar on maintenance of forest machinery in large and small-scale operations will be held in 1980 in Sweden (subject to confirmation)

1 1980

14.3.1.2.3. Location and methods of primary roundwood conversion

Description: The Joint Committee will determine optimum technical, economic and organizational solutions in the field of primary roundwood conversion by reviewing the location, management and methods of roundwood conversion.

Method of work: A special discussion will be organized at the thirteenth session of the Joint Committee, based on a report by a team of specialists.

2 1980

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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14.3.1.2.4. Terrain classification from the wood
harvesting point of view

Description: The Joint Committee will review studies on terrain classification and forest accessibility, with a view to facilitating international comparisons on accessibility of forest resources.

Method of work: A team of specialists will prepare a report on existing terrain classifications and those under preparation, including the work of the European Economic Community and IUFRO, to be submitted to the thirteenth session of the Joint Committee in 1980, which will decide on further action.

2	1980
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14.3.1.2.5. Compatibility of harvesting methods and
equipment with silviculture and the environment

Description: The Joint Committee will review harvesting methods and equipment and compare these with the methods applied in silviculture so as to determine compatibilities and incompatibilities, taking into account environmental aspects.

Method of work: A preliminary descriptive list of harvesting methods and equipment will be prepared by a team of specialists from the point of view of compatibility with silvicultural methods and the environment for submission to the Joint Committee at its thirteenth session in 1980, when further action will be decided.

2	1980
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14.3.1.2.6. Harvesting of wood for energy purposes

Description: The Joint Committee will review methods and equipment suitable for the production and harvesting of wood specifically destined for energy production, so as to determine the potential of the forest or special plantations to contribute economically to total energy supply.

Method of work: A report will be prepared by a team of specialists and submitted to the Joint Committee at its thirteenth session, in 1980.

1	1980
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<u>Estimated</u> <u>duration</u> <u>(in years)</u>	<u>Estimated</u> <u>termination</u> <u>year</u>
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14.3.1.3. Human aspects of forest operations

14.3.1.3.1. Vocational training in forestry

Description: The Joint Committee will assist Governments in planning their national vocational training policies by keeping under review developments and trends in vocational training in forestry to raise the efficiency of forest operations and improve working practices with regard to safety and health.

Method of work: A seminar will be organized every second year on a selected problem: in the second half of 1979 or in 1980 in Norway, on vocational training for small forest owners and farmers; in 1981 in the United Kingdom, on the selection of machine operators and assessment of their suitability for specific jobs; in 1983, in 1/ on vocational training problems specific to southern Europe.

cont.

14.3.1.3.2. Report on vocational training systems

Description: The Joint Committee will help Governments to review their national vocational training systems in the light of the latest developments.

Method of work: The ILO will prepare and circulate a report on the basis of returns from the 1977 enquiry; it will be updated and supplemented in 1982.

3

1982

14.3.1.3.3. Ergonomic problems applied to forestry

Description: The Joint Committee will help Governments in their national health and employment planning by keeping under review developments and trends in ergonomics applied to forestry, promoting safer working habits, preventing occupational injuries and diseases, increasing work performance and forest workers' satisfaction with their jobs.

Method of work: A seminar or training course will be organized every second year on a selected problem in the field of ergonomics applied to forestry (i.e. 1980, 1982, etc.). In 1980, in 1/ a seminar will be held on the health, physical and mental capacity of forest workers and the demands of forest work, occupational diseases and rehabilitation of forest workers.

cont.

1/ Host country to be decided.

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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14.3.1.3.4. Ergonomic problems related to chain saws
and brush saws

Description: The Joint Committee will study problems related to chain saws and brush saws to follow up the work carried out in 1974-76 by the ad hoc group of experts on noise and vibration in power saws; it will study and improve working methods and recommend safety rules, collect information on occupational diseases, establish measurement methods and standards of hygiene.

Method of work: A team of specialists will carry out this work in close collaboration with ILO and ISO and will submit a report to the thirteenth session of the Joint Committee.

2	1980
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14.3.1.3.5. Vocational rehabilitation of forest workers

Description: The Joint Committee will provide Governments with guidance in connexion with their services to rehabilitate injured, disabled or older forest workers.

Method of work: A team of specialists, with the collaboration of ILO, will collect information on possibilities and methods of rehabilitation of injured, disabled or older forest workers and submit it in the form of a report to the seminar in 1980 on the health, physical and mental capacity of forest workers (see sub-section 14.3.1.3.3.).

2	1980
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14.3.1.3.6. Social problems of forest workers

Description: The Joint Committee will examine forest workers' social status in comparison with that of other workers in the light of social and economic developments that have occurred in various countries in recent years and of future trends, in order to assess the problems created through the replacement of man by machine in forestry; the necessity to absorb unemployed labour in rural areas; the social condition of migratory versus locally resident labour, etc. This work aims at helping Governments solve recurring structural employment problems and those connected with the difficulty of finding adequate labour in forestry.

Method of work: A seminar will be organized, in collaboration with ILO and possibly IUFRO, preceded by an enquiry and/or a preparatory meeting to define the scope of the subject to be treated.

4	1982
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14.3.2. Wood preservation

Description: The Committee will review technical and economic developments in wood preservation with a view to encouraging the rational and economic use of wood.

Method of work: The Committee will decide at its thirty-seventh session, on the basis of a report by the secretariat, whether it should undertake further work in this field.

1 1979

14.3.3. Utilization of tropical hardwoods

Description: The Committee will review the utilization of tropical hardwoods with a view to analysing patterns and trends in the demand for these products and to identifying opportunities for expanding trade with developing countries.

Method of work: A seminar will be held in 1979 in the Netherlands.

2 1979

14.3.4. Effects of taxation on forest management and wood supply

Description: The Committee will review the effects of national taxation systems on forest management and wood supply with a view to assessing how these systems affect the supply/demand balance for forest products in the ECE region and the structure of international trade.

Method of work: The Joint FAO/ECE Working Party on Forest Economics and Statistics will undertake an enquiry on taxation, taking as a basis work carried out by the European Economic Community for its member countries.

2 1979

14.3.5. Economic and technical developments in the furniture industry

Description: The Committee will further the exchange of information on economic and technical developments in the furniture industry, with a view to assessing in quantitative and qualitative terms the use of forest products in that industry and the trends and prospects in the demand for forest products for that sector.

Method of work: A symposium will be held in 1979 in Poland.

2 1979

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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14.3.6. Modernization in the wood-based panels industries

Description: The Committee will further the exchange and dissemination of scientific, technological and economic information on modernization in the wood-based panels industries.

Method of work: A symposium will be organized, in collaboration with the Chemical Industries Committee, in 1980, in Finland, preceded by an informal preparatory meeting in 1979.

2

1980

14.3.7. Review of progress made in the chemical processing of wood (other than for pulp and paper) and the potential of the use of wood for chemical products

Description: In conjunction with the Chemical Industries Committee, the Committee will keep under review, from the technical and economic point of view, progress made in the chemical processing of wood (other than for pulp and paper) with a view to improving the utilization of by-products of the wood processing industries, and to assessing potential demand from the chemical industry for wood raw material, as well as the effect any increase would have on the supply/demand balance for forest products in the ECE region and the availability of raw material for traditional wood-using industries.

Method of work: A special lecture will be given to the Committee's thirty-seventh session, on the basis of which it will decide on further action.

1

1979

WORK AREA 14.4: ENVIRONMENTAL AND RESOURCE CONSERVATION
PROBLEMS

(All the Committee's activities in this work area will be carried out in co-operation with the Senior Advisers to ECE Governments on Environmental Problems).

14.4.1. Quantification and evaluation of the environmental benefits of forests

Description: The Joint FAO/ECE Working Party on Forest Economics and Statistics will examine methods of quantifying and evaluating the environmental benefits of forests with a view to assessing forests' contribution to society, to calculating compensation for the environmental services of forests and to facilitating comparisons between countries.

Method of work: Further work on the quantification of the environmental role of forests will be linked with project

14.5.2.4. An enquiry will be prepared by a meeting of experts 2 1979

14.4.2. Reduction of waste and development of use of residues in forestry, the wood-processing industries and in forest products utilization

Description: The Committee will assess ways of reducing waste and developing the use of residues in forestry, the wood-processing industries and in forest products utilization in order to further the rational use of the forest resource.

Method of work: A symposium will be held in 1982 in the USSR. 2 1982

14.4.3. Effects of air-borne pollution on vegetation

Description: The Committee will assess the effects of different types of air-borne pollution on vegetation with a view to improving the protection of the forest resource of the ECE region against such damage.

Method of work: A symposium will be held in 1979 in Poland, jointly with the Committee on Agricultural Problems and in co-operation with the Senior Advisers to ECE Governments on Environmental Problems and UNEP. 2 1979

14.4.4. Energy aspects of the forest industries

Description: The Committee will study energy use in forestry, the wood-processing industries and the use of forest products, with a view to identifying means to improve energy efficiency.

Method of work: The Committee will decide at its thirty-seventh session in 1979 whether it will undertake any further work in the energy field on the basis of the results of the seminar to be held in November 1978 in Italy. 1 1979

Estimated duration (in years)	Estimated termination year
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WORK AREA 14.5: COLLECTION, EXCHANGE AND DISSEMINATION OF INFORMATION, INCLUDING IMPROVEMENT AND HARMONIZATION OF STATISTICS (IN CO-OPERATION WITH FAO)

14.5.1. Timber Bulletin for Europe

Description: The Committee will collect statistics on production, trade and prices of forest products, with a view to providing Governments and the forest products sector with data on the basis of which to formulate policies and make decisions.

Method of work: The secretariat will publish, twice a year, the Timber Bulletin for Europe, containing quarterly statistics on production, trade and prices of forest products, collected from Governments by means of quarterly questionnaires.

cont.

14.5.2. Selected problems of economics and statistics of forestry and forest products

This project is covered by the activities of the Joint FAO/ECE Working Party on Forest Economics and Statistics which normally meets biennially (1979, 1981, 1983, etc.). It co-operates with the Conference of European Statisticians.

14.5.2.1. Comparability of statistics

Description: The Working Party will improve international comparability in selected areas of statistics in order to ensure that the data used by Governments for international comparisons and by the Committee in its analyses are as accurate and comparable as possible.

cont.

Method of work: The Working Party will collect information in each area by means of questionnaires and studies and formulate recommendations to Governments, which will be submitted to the Committee for approval. The Working Party will propose series for which such action is necessary.

cont.

14.5.2.2. Organization and periodicity of statistical data collection and dissemination

Description: The Working Party will review periodically the Committee's programme of collection and dissemination of statistical data, to ensure that it corresponds with the needs of Governments.

Method of work: The Working Party will review periodically the Committee's programme of collection and dissemination of statistical data and make recommendations to improve its organization, coverage and periodicity.

cont.

Estimated duration
(in years) Estimated termination
year

14.5.2.3. Conversion factors

Description: The Working Party will review the conversion factors for forest products applicable to individual countries, in order to facilitate international comparison of yields and to ensure that the conversion factors used by the secretariat in its analyses reflect current technology.

Method of work: The Working Party will review at four-yearly intervals (1981, 1985, etc.) conversion factors communicated by Governments in reply to a questionnaire.

cont.

14.5.2.4. Forest resource analysis

Description: The Working Party will review methods of forest inventory used by Governments and by the secretariat to ensure that all parameters relevant to measuring actual productive potential of the forest, as well as parameters measuring change, both for wood and non-wood benefits, are taken into account and that the methods adopted correspond as closely as possible to the needs of all the users.

Method of work: An ad hoc meeting will be held in 1979. 2 1979

14.5.2.5. Labour statistics

Description: The Working Party, in co-operation with the Joint FAO/ECE/ILO Committee on Forest Working Techniques and Training of Forest Workers, will study labour input, average wage rates and earnings in forestry, with a view to providing more data on cost trends and a basis for comparison of employment and earnings.

Method of work: The pilot enquiry undertaken by an informal team of experts will be revised and extended to cover all ECE countries. 2 1979

14.5.2.6. End-use statistics

Description: The Working Party will review the coverage and availability of statistics on the end-uses of forest products with a view to improving the data base for the Committee's work in this area (see 14.1.2.).

Method of work: The secretariat will circulate an enquiry on the broad pattern of end-use of sawnwood and wood-based panels. The Working Party will review at its twelfth session the results of this survey and propose possible further activities in this field. 2 1979

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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14.5.2.7. Forest fire statistics

Description: The Working Party will improve the exchange of information on forest fires, their causes and methods of prevention and protection and the costs involved.

Method of work: The Working Party will decide on a method of work at its twelfth session, scheduled for 1979. 2 1981

14.5.3. Dissemination and exchange of general
information and experience

Description: The Committee will further the dissemination and exchange of information and experience on selected themes within its area of competence, by dissemination of statistical and other information on countries' forestry and forest products sector, and by organizing annual study tours at the invitation of the countries concerned with a view to making available to Governments and the forest products sector experience gained in individual countries.

Method of work: In 1979, a study tour will be organized in the USSR 1/. Country forest and forest products profiles will be prepared by the secretariat, in collaboration with the Governments of the countries concerned, and published at five- to six-year intervals.

cont.

1/ Host countries for 1980 and after to be decided (the USA will be host in 1981 or 1982).

15. - TRADE

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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WORK AREA 15.1: ANALYSIS AND REVIEW OF RECENT AND
PROSPECTIVE TRADE TRENDS, POLICIES
AND PROBLEMS

15.1.1. Review of short- and long-term trade trends,
prospects and policies: changes and problems
affecting intra-regional trade

Description: The Committee will review, at its annual sessions, trade trends and prospects with a view to exchanging information and experience useful to policy-makers in formulating their economic and trade policies. It will, at the same time, examine changes and problems in trade policies affecting intra-regional trade with a view to obtaining accurate and up-to-date information on the general policy framework affecting the development of trade.

Method of work: Participants in the annual sessions of the Committee will give accounts of bilateral and regional developments of relevance to trade between member countries, and will review recent trends, policies and problems in intra-regional trade including general trade problems of the member countries which are developing from the economic point of view. Reviews will also be presented by the secretariat, inter alia, in the Economic Bulletin for Europe for consideration by the Committee. A special chapter in the Bulletin will be devoted to trends policies and problems in the development of trade of the latter member countries. At its twenty-eighth session, the Committee will consider a secretariat study defining and describing the use of countertrade practices in the ECE region and will give the precise mandate for an ad hoc Meeting to examine the problems of compensation trade which will be held in 1980.

cont.

15.1.2. Review of the effects of structural changes in
economic sectors or branches as well as of
technological progress on the composition and
geographical patterns of trade

Description: The Committee will examine these effects and will exchange information and experience useful to policy-makers in formulating their economic and trade policies.

Method of work: A study will be prepared by the secretariat for consideration by the Committee at its twenty-eighth session.

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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15.1.3. Review of trade and economic co-operation agreements

Description: The Committee will examine progress made and techniques used in these agreements with a view to exchanging relevant information and experience.

Method of work: Participants in the annual sessions of the Committee will comment on these agreements. (Reference is made to project 15.1.7)

15.1.4. Review of developments in sub-regional economic groupings affecting intra-regional trade

Description: The Committee will consider these developments in order to exchange information and experience and to identify problems.

Method of work: A study will be prepared by the secretariat for consideration by the Committee at its twenty-ninth session. An annotated outline will be submitted to the Committee for prior consideration at its twenty-eighth session.

2

1980

15.1.5. Review of inter-regional trade with special reference to the expansion of trade with the developing countries

Description: On the occasion of the general discussion at its annual sessions, the Committee will pay attention to developments in inter-regional trade and, in particular, in trade with developing countries.

Method of work: Studies on selected problems, as determined by the Committee, for consideration at any of its sessions will be prepared by the secretariat in co-operation with the secretariat of UNCTAD, of the other regional economic commissions or of other bodies in the United Nations system on the basis of their relevant decisions and of studies prepared by them. Similarly, as for the joint ECE/ECLA study, the ECE secretariat will approach the secretariats of other regional economic commissions in order to find the ground for joint studies on inter-regional trade, taking into account at the same time Commission decision G (XXXVIII).

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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15.1.6. Co-operation with the Senior Economic Advisers to ECE Governments on the Overall Economic Perspective for the ECE Region up to 1990

Description: The Committee will consider and comment upon the Overall Economic Perspective drawn up by the Senior Economic Advisers to ECE Governments and will bring to the attention of the Senior Economic Advisers the results of its own relevant work in accordance with Commission decision G (XXXII).

Method of work: The Executive Secretary will convene in 1979 an ad hoc Meeting of Trade Experts to consider the contribution of the Committee to the work of the Senior Economic Advisers to ECE Governments on the Trade Aspects of the Overall Economic Perspective for the ECE Region up to 1990.

1

1979

15.1.7. Maintenance of a Register of long-term agreements between countries having different economic and social systems in the field of trade, economic, industrial and technological co-operation

Description: The Committee will consider at its annual sessions changes in the number, scope and content of these agreements.

Method of work: The secretariat will prepare annually an up-to-date Register of long-term agreements on the basis of the texts of these agreements to be notified by ECE Governments by 30 June each year. The secretariat will analyse the material and present studies to enable the Committee to follow new developments.

cont.

15.1.8. Study on the possibilities of creating a multilateral system of notification of laws and regulations concerning foreign trade and changes therein

Description: The Committee will examine the possible scope and functioning of such a system in order to assess whether its creation would be practicable and desirable.

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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Method of work: The line of action suggested in document TRADE/R.372 will be followed. A further trial run of three months will be organized at an appropriate time. ECE member countries which have not already done so will be invited to reply to the questionnaires on primary and secondary sources with a view to making it possible for the secretariat to draw up as complete an Inventory as possible. An ad hoc Meeting will then be convened to carry out a detailed study of the results of a new trial run and of the survey of primary and secondary sources, and to make suggestions regarding the application of a possible future system.

The Executive Secretary may convene ad hoc meetings, as necessary.

WORK AREA 15.2: IDENTIFICATION OF ALL KINDS OF OBSTACLES TO THE DEVELOPMENT OF TRADE AMONG ECE MEMBER COUNTRIES, ESPECIALLY IN EAST-WEST TRADE, AND ENDEAVOURS TO REDUCE OR PROGRESSIVELY ELIMINATE THEM GIVING DUE ATTENTION TO MEASURES FOR THE PROMOTION OF TRADE AND DIVERSIFICATION OF ITS STRUCTURE

15.2.1. Maintenance of an up-to-date Inventory of all kinds of obstacles to the development of trade

Description: To assist the Committee in its work towards identifying all kinds of obstacles to trade, an up-to-date Inventory of those obstacles will be maintained by the secretariat on the basis of information provided by Governments.

Method of work: Notification of appropriate information by ECE Governments to the secretariat by 31 May each year and notification of comments on such information by 30 September each year. In 1979 these notifications will be transmitted to the secretariat by 31 January and comments by the end of June (see also project 15.2.2). The Committee will consider, at its annual sessions, an Inventory transmitted by the secretariat, based on these notifications.

cont.

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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15.2.2. Identification of all kinds of obstacles to the development of trade and examination of the question in which way steps can be taken within ECE for reduction or progressive elimination of those obstacles

Description: All kinds of existing obstacles to the development of trade will be reviewed by the Committee at intervals to be determined by the Committee with a view to finding ways for their reduction or progressive elimination. The Committee will, in appropriate cases, prepare mutually-acceptable proposals and recommendations in this field.

Method of work: Background material facilitating the identification of all kinds of obstacles to trade, such as the Inventory of all kinds of obstacles to the development of trade, will be submitted by the secretariat and/or by member Governments. On the basis of such identification the Committee, at intervals thus determined, will consider in which way steps can be taken within the ECE for the reduction or progressive elimination of those obstacles. The revised version of the Inventory will be discussed by an ad hoc Meeting to be held in Geneva in 1980. In 1979 ECE Governments will verify whether previous notifications are still up to date and will communicate any additional notifications by 31 January 1979. On the basis of comments on notified obstacles to trade received from ECE Governments up to the end of June 1979 the secretariat will complete consolidation of the Inventory with a view to issuing it as a single notified document containing both notifications and comments by September 1979.

cont.

15.2.3. Preparation of proposals and recommendations on measures for the promotion of trade and the diversification of its structure

Description: The Committee will examine, at intervals to be determined by the Committee, means of promoting trade and diversifying its structure, with a view to preparing proposals and recommendations conducive to the achievement of these aims.

Method of work: Consideration in the Committee, at intervals thus determined, of proposals made by Governments with a view to the drawing up of agreed recommendations by the Committee. Background material will be prepared by the secretariat, as required, for consideration by the Committee.

cont.

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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15.2.4. Promotion, collection and dissemination of economic, commercial and relevant administrative information

Description: The Committee will consider, at its annual sessions, means of promoting, collecting, publishing and disseminating economic, commercial and relevant administrative information in order to create better conditions for the development of trade.

Method of work: Member Governments are invited to transmit further views by 30 June 1979 on the kinds of basic economic and commercial information they feel are needed to improve conditions for development of trade within the region. The secretariat will circulate such communications and submit them to the Committee at its twenty-eighth session, together with a brief survey study of the information activities of other international bodies with particular relevance to the extent to which these fulfil the needs of businessmen. Background studies will be prepared by the secretariat, as required, for consideration by the Committee. An ad hoc meeting will be held in 1980 to discuss means of promoting, collecting, publishing and disseminating economic, commercial and relevant administrative information.

cont.

WORK AREA 15.3: THE DEVELOPMENT OF MARKET INFORMATION, MARKETING TECHNIQUES AND IMPROVED BUSINESS CONTACTS

15.3.1. International co-operation in the field of trade promotion, including marketing

Description: The Committee will examine, at its annual sessions, means of developing and exchanging information and experience in the field of trade promotion, including marketing, in order to facilitate the development of trade.

Method of work: Drawing up of relevant proposals and recommendations by the Committee. The secretariat will prepare studies on selected problems as required by the Committee. The secretariat will report on the development of co-operation with relevant international organizations and institutions, especially the ICC Liaison Committee with Chambers of Commerce in Socialist Countries.

cont.

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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15.3.2. Convening of Seminars on East-West Trade
Promotion, Marketing and Business Contacts

Description: Seminars will be convened by the Committee to deal with specific themes relating to east-west trade promotion, marketing and business contacts. The theme of each Seminar will be determined by the Committee or by a preparatory meeting, as appropriate.

Method of work: Reports and case-studies will be prepared by government experts and by the secretariat for consideration at Seminars; the proceedings, conclusions and recommendations of the Seminars will be widely disseminated. A Fifth Seminar on East-West Trade Promotion, Marketing and Business Contacts will be held in Poznan, Poland, in April 1979.

15.3.3. Publication and dissemination of information to
help businessmen in commercial contacts

Description: The Committee, at biannual intervals, will review and give guidance to the secretariat concerning the publication and dissemination of ECE information materials to assist businessmen in their commercial contacts.

Method of work: Following the Committee's guidance and on the basis of information supplied by Governments, the secretariat will publish lists of directories and, where possible, organizational charts of firms and organizations concerned with foreign trade.

15.3.4. ECE symposia at international trade fairs

Description: Organization by the ECE of special meetings or symposia for exchange of information in connexion with international fairs held in the ECE region.

Method of work: Delegations interested in participating in the organization of such symposia will submit concrete proposals for the consideration of the Committee.

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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WORK AREA 15.4: PROMOTION OF TRADE THROUGH INDUSTRIAL
CO-OPERATION

15.4.1. Analysis of short- and long-term trends and
prospects for industrial co-operation

Description: The Committee will examine short- and long-term trends and prospects for industrial co-operation including all kinds of obstacles, ^{1/} with a view to exchanging information and experience useful to policy-makers in establishing policies regarding industrial co-operation.

Method of work: Studies, including an up-dating of the statistical part of the Analytical Report on Industrial Co-operation among ECE countries, will be discussed at an ad hoc Meeting on Industrial Co-operation, to be held in 1980. The precise subject-matter of this Meeting will be discussed by the Committee at its twenty-eighth session.

2

1980

15.4.2. Examination of proposals and recommendations
designed to create favourable conditions for
industrial co-operation

Description: The Committee will examine means which could create more favourable conditions for industrial co-operation, giving due attention to proposals made at the second ad hoc Meeting on Industrial Co-operation.

Method of work: Consideration by the Committee and/or by the ad hoc Meeting on Industrial Co-operation of relevant proposals and recommendations. Background material will be prepared by the secretariat, as required.

cont.

15.4.3. Examination of means of improving the provision
of information to those concerned on general
conditions for the promotion of trade through
industrial co-operation and guidance on the
preparation of contracts in this field

Description: The Committee will examine annually the range of information requirements of those engaged in industrial co-operation, as well as the adequacy of existing information flows and channels, with a view to undertaking measures to improve the provision of relevant information and guidance on the preparation of contracts in this field.

^{1/} Obstacles to trade are dealt with in
Work Area 15.2.

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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Method of work: On the basis of material provided by member Governments, as well as of secretariat studies, the Committee and/or ad hoc meetings will consider the existing international information channels and possible means of improving them. Relevant proposals and recommendations will be made by the Committee.

cont.

- 15.4.4. Collection and dissemination of information relevant to the promotion of trade through industrial co-operation, in particular the laws and regulations, including those relating to foreign exchange, general orientation of national economic plans and programmes as well as programme priorities and economic conditions of the market

Description: The Committee, at its annual sessions, will examine means of improving the dissemination of such information through the ECE, inter alia, in the form of special country manuals, in order to ameliorate the knowledge of existing possibilities for the development of industrial co-operation.

Method of work: Consideration by the Committee and drawing up of appropriate proposals and recommendations by the Committee on the basis of studies by the secretariat. A special study will be carried out on the possibilities of publishing special country manuals, including costs.

cont.

- 15.4.5. Preparation of a Guide for drawing up international engineering contracts, including related aspects of technical assistance

Description: A Guide for drawing up international engineering contracts, including related aspects of technical assistance will be prepared for the use of enterprises and institutions engaged in or interested in concluding such contracts.

Method of work: Meetings of the Group of Experts on International Contract Practices in Industry, working on the basis of background information prepared by the secretariat and by government rapporteurs.

2

1930

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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WORK AREA 15.5: PROMOTION OF THE DEVELOPMENT OF TRADE THROUGH THE IMPROVEMENT OF INTERNATIONAL TRADE PROCEDURES, CONTRACT PRACTICES, TRADE PRACTICES OF STANDARDIZATION AND COMMERCIAL ARBITRATION

15.5.1. Facilitation of international trade procedures

Description: The Committee will examine activities, practices and formalities involved in collecting, presenting, communicating and processing data required for the practical conduct of international trade. The activities will be divided into:

- 15.5.1.1. simplification and standardization of trade documentation; and
- 15.5.1.2. data requirements and use of automatic data processing and drawing up of codes for data elements.

Method of work: The Committee will review annually the work of the Working Party on Facilitation of International Trade Procedures and its Group of Experts on Data Requirements and Documentation and Group of Experts on Automatic Data Processing and Coding. In the Working Party, recommendations concerning the facilitation of international trade procedures will be agreed on the basis of studies undertaken by the secretariat and/or by government rapporteurs and discussions in the respective Groups of Experts. A quarterly information bulletin, Trade Facilitation News, is issued by the secretariat. The secretariat will continue to undertake this work in close co-operation with the Special Programme on Trade Facilitation (FALPRO) in UNCTAD.

cont.

15.5.2. Preparation and periodic revision of guides and general conditions relating to contracts for international commercial transactions

Description: The Committee will follow the work on the preparation of general conditions relating to standard contracts for international commercial transactions in selected fields.

Method of work: The Committee will review annually the work undertaken in this field by the Group of Experts on International Contract Practices in Industry. The secretariat will keep the Committee informed of the work of other bodies such as the Group of Experts on International Trade Practices relating to Agricultural Products.

cont.

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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15.5.3. Examination of trade aspects of international standardization and certification procedures

Description: The Committee will examine relevant aspects of standardization and certification procedures. Inter alia, attention will be paid to the promotion of international agreements and other appropriate arrangements on acceptance of certificates of conformity with standards and technical regulations.

Method of work: For consideration by the Committee, studies will be prepared by the secretariat on the basis of work undertaken by the Principal Subsidiary Bodies concerned and the Meetings of Government Officials Responsible for Standardization Policies, as well as work undertaken by other international bodies.

2

1980

15.5.4. Preparation of a Manual on licensing procedures and related aspects of technology transfer

Description: The Committee, in co-operation with the Senior Advisers to ECE Governments on Science and Technology, will draw up a Manual on licensing procedures and related aspects of technology transfer for the information of enterprises engaged in the licensing of technology or its transfer within the ECE region.

Method of work: A Manual will be prepared by the secretariat on the basis of country chapters transmitted by ECE Governments. A seminar to be convened jointly with the Senior Advisers to ECE Governments on Science and Technology in 1980 will discuss a selected subject related to technology transfer.

2

1980

15.5.5. International Commercial Arbitration

Description: The Committee will follow relevant developments concerning international commercial arbitration, especially developments linked to the use of the Special Committee envisaged in Article IV of the European Convention on International Commercial Arbitration, 1961; the Arbitration Rules of the United Nations Economic Commission for Europe, 1966; and the UN/ECE Arbitration Rules for Certain Categories of Perishable Agricultural Products (expected to become operational in 1979). The secretariat will prepare and issue at prescribed intervals a list of the members of the Special Committee mentioned above.

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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Method of work: The secretariat will provide information as required. Care will be taken to avoid duplication of any work pursued under this project and related work undertaken by the United Nations Commission on International Trade Law (UNCITRAL).

cont.

WORK AREA 15.6: TRADE PROBLEMS OF THE MEMBER COUNTRIES OF THE ECE WHICH ARE DEVELOPING FROM THE ECONOMIC POINT OF VIEW

15.6.1. Review of intra-regional trade taking into account the interests of the member countries of the ECE which are developing from the economic point of view as referred to in paragraph 234 of the Commission's Annual Report on its thirty-first session.

Description: The Committee will examine, at its annual sessions, the expansion of intra-regional trade with these member countries.

Method of work: The Committee will base its examination mainly on information given in the special chapter of the Economic Bulletin for Europe, see project 15.1.1 above, as well as on the wider scope of the study on migrant workers which will include other aspects of the economic development of these countries, taking into account Commission decision A (XXXIII).

cont.

15.6.2. Trade problems specific to the member countries of the ECE which are developing from the economic point of view and consideration of action in respect of identified problems

Description: The Committee, at its annual sessions, will identify and examine trade problems specific to the above-mentioned countries and will consider what action could be taken within the ECE with a view to finding appropriate solutions to these problems.

Method of work: Studies will be prepared by the secretariat with the help of government rapporteurs on problems selected by the Committee for its consideration.

cont.

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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15.6.3. Measures to improve trade promotion efforts of the member countries of the ECE which are developing from the economic point of view

Description: The Committee, at its annual sessions, will examine trade promotion efforts, undertaken by these countries in selected fields with a view to establishing measures which could improve the effectiveness of their trade promotion.

Method of work: Studies will be prepared by the secretariat with the help of government rapporteurs and in co-operation, as appropriate, with UNCTAD and the International Trade Centre for consideration by the Committee. The secretariat in co-operation with the secretariats of UNCTAD and ITC will also provide assistance, at the request of the Governments concerned, in the trade promotion efforts of these countries, including requests for assistance from the UNDP either on a national or a regional basis.

cont.

15.6.4. Study of the potential scope and methods of closer commercial and industrial co-operation among the member countries of the ECE which are developing from the economic point of view as well as between these countries and the other ECE countries and the non-member Mediterranean countries in accordance with Commission decision G (XXXIII)

Description: The Committee will examine the potential scope and methods of this co-operation with a view to making proposals and recommendations aimed at strengthening commercial and industrial co-operation amongst these countries.

Method of work: A study will be prepared by the secretariat with the help of government rapporteurs for consideration by the Committee at its twenty-ninth session.

2

1980

16. WATER PROBLEMS

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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WORK AREA 16.1: LONG-TERM PROSPECTS AND PLANNING
OF THE WATER ECONOMY

16.1.1 Review and analysis of existing situation and
future prospects regarding the utilization
of water resources and water pollution
control in the ECE region

Description: The Committee will keep under review the present and prospective situation regarding water resources use and pollution control in the region, in order to promote co-operation between ECE Governments in water resources management by a systematic exchange of information and experience in this particular field.

Method of work: At each plenary session the Committee will exchange views on major trends and policies with regard to integrated water resources management. At three- to five-year intervals, governments will prepare country monographs, including statistical data on water use, along common guidelines adopted by the Committee. The secretariat will prepare a consolidated report on the basis of country monographs. The next report will be prepared in 1982/1983.

cont.

16.1.2 Long-term perspectives for water use and supply

Description: As a follow-up to the Seminar on Long-Term Planning of Water Management, held in Bulgaria in 1976, the Committee will consider long-term perspectives for water resources development in order to provide technical grounds for policy guidance in the preparation of national plans and programmes on water resources.

Method of work: Rapporteurs from Czechoslovakia, France, German Democratic Republic, Hungary and USSR will prepare different chapters of a draft report for the seventh session of the Group of Experts on Aspects of Water Quality and Quantity. The secretariat with the help of general rapporteurs will prepare a consolidated draft report for the consideration of the eleventh session of the Committee on Water Problems.

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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16.1.3 Drinking water supply and effluent disposal

Description: The Committee will pay attention to the development and improvement of drinking water supply and effluent disposal as part of the implementation at the regional level of the International Drinking Water Supply and Sanitation Decade, recommended by the United Nations Water Conference.

Method of work: Details are given under each project component.

16.1.3.1 Water supply and effluent disposal systems serving areas with seasonal population fluctuations

Description: The Committee will examine problems associated with water supply and effluent disposal systems serving areas with seasonal population fluctuations. In particular, innovative methods designed to cope with high seasonal fluctuations of demand in order to minimize investment costs will be studied.

Method of work: [To be completed by the Committee at its eleventh session]

2	1981
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16.1.3.2 Water supply and effluent disposal systems in low-populated areas

Description: The Committee will examine economic and institutional problems associated with the provision of water and effluent disposal in low-populated areas in order to have economic and safe supplies of water and environmentally acceptable means of waste water disposal.

Method of work: [To be completed by the Committee at its eleventh session]

2	1982
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16.1.3.3 Protection of groundwater

Description: Considering the importance of groundwater as a source of drinking water, the Committee will examine existing practices for the control of the draw-down and quality of aquifers. In particular, attention will be paid to ways and means of restricting the use of groundwater for priority purposes, monitoring groundwater quality, recharging aquifers, establishing protection zones and ensuring long-term protection of groundwater quality. In the preparation of the project account may be taken of related activities carried out by UNESCO under the International Hydrological Programme.

	<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
<u>Method of work:</u> [To be completed by the Committee at its eleventh session]	2	1983
16.1.3.4 <u>System of water supply and effluent disposal in urban areas</u>		
<u>Description:</u> The Committee will examine economic and institutional aspects associated with water supply systems and sewerage systems in densely populated areas and in particular in old town centres in order to ensure economic and safe supplies of water and environmentally acceptable means of waste water disposal.		
<u>Method of work:</u> [To be completed by the Committee at its eleventh session]	2	1984
16.1.4 <u>Analysis of methods of determining degree of utilization of river basins and of legislative and administrative action needed at different stages of development</u>		
<u>Description:</u> The Committee will review the methodology of determining the degree of utilization of a river basin, including both quantitative and qualitative aspects, as a follow-up to the Seminar on Long-Term Planning of Water Management at Zlatni Piasatzi. The Committee will further analyse the administrative and legislative action for integrated water planning at different stages. Guidelines for proper long-term river basin development, including conceptual and methodological aspects, might later be developed.		
<u>Method of work:</u> [To be completed by the Committee at its eleventh session]	2	1981
16.1.5 <u>Harmonization of water statistics</u>		
<u>Description:</u> As a follow-up to the Seminar on Long-Term Planning of Water Management, held in Zlatni Piasatzi, the Committee will examine ways and means of harmonizing the components of national data so that the details of water use, including both quality and quantity aspects, may be directly comparable. The Committee will also promote harmonization of statistical data in transboundary river basins.		
<u>Method of work:</u> The Committee will decide upon the steps to be taken for the harmonization of national statistical data on the basis of experience in the implementation of project 16.1.2. The harmonization of statistical data along transboundary river basins will be raised at the Meeting on International River Commissions.	3	1982

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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16.1.6 Integration of long-term planning of
water management to land-use planning

Description: The Committee will review the concepts and methods for the integration of water management and land-use planning as a follow-up to the Seminar on Long-Term Planning of Water Management, held in Zlatni Piasatzi. Particular attention will be paid to the relationship between development action and available water quality and quantity, and to the role of land-use planning in the protection of water resources.

Method of work: A seminar will be held in 1982 by the Committee after its programme has been formulated at a preparatory meeting to be held in 1981.

2	1982
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16.1.7 Methodology of setting priorities for
water pollution control measures

Description: The Committee will review the methodology of setting priorities for water pollution control measures, including that of assessing alternatives for accomplishing those measures, in order to make recommendations for the proper inclusion of water quality management in integrated water resources plans.

Method of work: [To be completed by the Committee at its eleventh session]

3	1983
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WORK AREA 16.2: ECONOMIC PROBLEMS OF WATER MANAGEMENT

16.2.1 Economic instruments for rational utilization
of water resources

Description: The Committee will exchange views and experience between ECE Governments in (i) the evaluation of the effectiveness of economic incentives in water supply and waste water disposal systems; (ii) influence of water prices on water utilization and water discharges; and (iii) methods of allocation and optimization of investments for water resources development; in order to promote more rational and economic utilization of water resources in ECE countries through the extensive use of these economic tools.

Method of work: A seminar will be held in the Netherlands in 1980. The programme of the seminar will be formulated at a preparatory meeting to be held in 1979.

2	1980
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<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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16.2.2 Relationship between water and energy

Description: In order to optimize the use of available water resources, the Committee will concentrate on the energy sector and promote rational sharing of the hydroelectric potential and cooling capacity of watercourses. Other water uses should also be taken into account in order to promote optimum water resources management planning.

Method of work: [To be completed by the Committee at its eleventh session]

2	1980
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16.2.3 Techniques and means for drought and flood management

Description: The Committee will review and consider existing programmes and techniques for drought management and initiate studies to develop improved bases for planning land and water management. The Committee will up-date its earlier study on flood management with particular emphasis on disaster prevention and preparedness.

Method of work: [To be completed by the Committee at its eleventh session]

2	1982
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16.2.4 The establishment of water grids and the conveyance of water over long distances

Description: The Committee will study the various (economic, environmental, social, etc.) aspects of the establishment of water grids, including the conveyance of water over long distances, in order to promote policies to overcome regional economic disparities due to water shortage.

Method of work: [To be completed by the Committee at its eleventh session]

2	1983
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16.2.5 Administrative and financial problems in river basin development and management

Description: The Committee will review present practices for the optimum management of water resources in river basin development, in order to select the administrative and financial arrangements applicable to different social and political systems.

Method of work: [To be completed by the Committee at its eleventh session]

3	1984
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<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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WORK AREA 16.3: ENVIRONMENTAL PROBLEMS OF WATER MANAGEMENT

16.3.1 Prevention and control of water pollution,
including transboundary pollution

Description: The Committee will keep under review progress made in the prevention and control of water pollution, including transboundary pollution, in order to provide a basis for co-operation among countries involved in the spirit of the Final Act of the Conference on Security and Co-operation in Europe and to assist them at the request of all ECE member Governments sharing a particular water resource.

Method of work: Details are given under each project component below.

cont.

16.3.1.1 ECE Declaration of policy on prevention
and control of water pollution, including
transboundary pollution

Description: The new declaration will complete and up-date, in the light of the Final Act of the Conference on Security and Co-operation in Europe and taking into account the results of the United Nations Water Conference, the ECE declaration of policy on water pollution control adopted by the Economic Commission for Europe in 1966.

Method of work: The Committee entrusted a group of rapporteurs with the elaboration of a revised version of the draft declaration contained in document WATER/R.56 to be submitted to the seventh session of the Group of Experts on Aspects of Water Quality and Quantity.

2

1979

16.3.1.2 Compilation of existing conventions and
international agreements between ECE
countries concerning water resources

Description: The Committee will undertake the compilation of existing conventions and international agreements between ECE countries concerning water resources under both quality and quantity aspects, aiming at facilitating co-operation among ECE Governments in the light of the Final Act of the Conference on Security and Co-operation in Europe.

	<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
<p><u>Method of work:</u> A revised version of the draft synoptic list will be prepared by the secretariat for consideration by the Group of Experts on Aspects of Water Quality and Quantity at its seventh session. This synoptic list should form part of a report on the compilation of existing conventions and international agreements between ECE countries concerning water resources, to be prepared bearing in mind possible results of the Meeting on International River Commissions, tentatively scheduled for early 1980.</p>	3	1980
<p>16.3.2 <u>Protection of the marine environment from pollutants emanating from land-based sources</u></p>		
<p><u>Description:</u> As a follow-up to the seminar on the protection of coastal waters against pollution from land-based sources, held in Lisbon in 1975, the Committee will continue to consider these matters in order to promote international co-operation in this particular field and stands ready to consider any request for assistance in the work that is going on.</p>		
<p><u>Method of work:</u> The Group of Experts on Aspects of Water Quality and Quantity at its seventh session will take steps further to implement the project on the basis of relevant documentation to be prepared by a rapporteur from Finland.</p>	cont.	
<p>16.3.3 <u>Comparison and analysis of methods for defining standards of water quality</u></p>		
<p><u>Description:</u> The Committee will review and compare methods used in ECE countries for developing, establishing and implementing water quality standards, effluent standards or limitations, and drinking water standards, in order to gain information and to explore the feasibility of establishing a certain harmonization and integration of these standards at an international level.</p>		
<p><u>Method of work:</u> The Committee has entrusted a task force of government rapporteurs under the leadership of Hungary to continue work on the comparison and analysis of methods for defining the various national standards of water quality, including effluent standards, taking into account the recommendations contained in Part III, paragraph (b), (c) and (d) of document WATER/R.59.</p>	3	1979

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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16.3.4 Methods for assessing the economic impact caused by water pollution due to activities related to recreation and amenities

Description: The Committee will consider methods used in different countries for assessing the economic impact of water pollution due to activities related to recreation and amenities, in order to provide ECE governments with information on the methods and criteria existing in the region.

Method of work: [To be completed by the Committee at its eleventh session]

2	1981
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16.3.5 Measures for efficient protection and improvement of the environment in water resources development

Description: The Committee will review national policies for the protection and improvement of the environment in water resources development, paying particular attention to social considerations, in order to identify appropriate environmental indicators and to make recommendations to ECE governments on ensuring environmental protection in water resources development.

Method of work: [To be completed by the Committee at its eleventh session]

3	1982
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16.3.6 Factors influencing the reduction of polluting substances discharged by different industrial branches

Description: The Committee will consider factors influencing the reduction of water-borne pollutants in different industrial sectors in order to elaborate recommendations to reduce the pollution load of industrial effluents. These recommendations will be of value in reducing water pollution and will be a useful tool for decision-making in water management.

Method of work: [To be completed by the Committee at its eleventh session]

2	1982
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Estimated Estimated
duration termination
(in years) year

16.3.7 Setting up and operating of water quality
and pollution sources monitoring devices
with special regard to automatic alarm
systems

Description: The Committee will proceed with an exchange of information on available water quality and pollution sources (including waste discharge) monitoring devices, including records of operational experience, and will consider the requirements of water and waste monitoring stations in respect of their characteristics, location, density and frequency of observations, with particular reference to automatic alarm systems, in order to provide grounds for international co-operation in setting up and operating of international monitoring systems, including automatic alarm systems for monitoring accidental pollution.

Method of work: [To be completed by the Committee at its eleventh session]

3

1985

WORK AREA 16.4: RESEARCH AND DEVELOPMENT

16.4.1 Application of systems analysis in water
resources management

Description: The Committee will review present know-how in the application of systems analysis in water resources management, emphasizing the practical rather than theoretical aspects, in order to promote good decision-making in water management through a more extensive use of these mathematical tools.

Method of work: The Committee, at its seventh session, entrusted a task force of government rapporteurs under the leadership of France with the preparation of a report on this subject. The final report will be submitted to the Committee at its eleventh session.

3

1979

16.4.2 Rational utilization of water

Description: The Committee will review and consider ways of improving the utilization of water, through inter alia administrative control systems supported by appropriate legislation, water pricing, and the development of convenient, reliable and inexpensive devices for water use, in order to make recommendations to ECE Governments regarding the proper and economic use of available water resources, giving consideration not only to increasing cost efficiency but also to ensuring optimum social benefits from water resources savings.

	<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
<u>Method of work:</u> A seminar will be held in Leipzig, German Democratic Republic, from 17 to 22 September 1979. The programme of the seminar was formulated at a preparatory meeting held in Geneva from 13 to 15 March 1978.	2	1979
16.4.3 <u>Techniques and means for industrial and municipal sewage effluent purification</u>		
<u>Description:</u> The Committee will review and consider the present techniques of purification of municipal and industrial effluents in order to promote the application of advanced technologies as well as to make recommendations on methods and criteria for the optimization of waste water treatment.		
<u>Method of work:</u> The secretariat will prepare an outline of a report on this topic for consideration by the Group of Experts on Aspects of Water Quality and Quantity at its seventh session	2	1980
16.4.4 <u>Water pollution from animal production</u>		
<u>Description:</u> As a follow-up to the seminar on the pollution of waters by agriculture and forestry, held in 1973, the Committee will review techniques for the prevention of water pollution originating from animal production, in order to promote efforts among ECE Governments for the control of this important source of water pollution.		
<u>Method of work:</u> The Committee will organize a seminar in 1981 on this subject jointly with the Committee on Agricultural Problems. A preparatory meeting will be convened in 1980 to formulate the programme of the seminar.	2	1981
16.4.5 <u>Use of treated domestic sewage</u>		
<u>Description:</u> The Committee will review present practices for the use of treated domestic sewage for other purposes (e.g. recharging aquifers, irrigation, cooling water, etc.) in order to establish guidelines and promote joint research among ECE Governments for a more rational use of available water resources.		
<u>Method of work:</u> [To be completed by the Committee at its eleventh session]	2	1982

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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16.4.6 Water recycling in industrial processes

Description: The Committee will examine critical industrial sectors in order to determine how the recycling of process waters is being promoted and to identify future research needs in order to encourage a more rational use of water resources.

Method of work: A seminar will be convened in 1983 by the Committee after its programme has been formulated at a preparatory meeting in 1982.

2

1983

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