



ECONOMIC COMMISSION FOR EUROPE

ANNUAL REPORT

(28 April 1979 — 26 April 1980)

ECONOMIC AND SOCIAL COUNCIL
OFFICIAL RECORDS, 1980

SUPPLEMENT No. 8

VOLUME II

UNITED NATIONS

New York, 1980

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/1980/28/Add.1 E/ECE/1008/Add.1 |
|-------------------------------------|

CONTENTS

VOLUME I

| | <u>paragraphs</u> | <u>page</u> |
|---|-------------------|-------------|
| INTRODUCTION | 1 | |
| CHAPTER | | |
| I ISSUES THAT REQUIRE ACTION BY, OR ARE BROUGHT TO THE ATTENTION OF, THE ECONOMIC AND SOCIAL COUNCIL | 2 | |
| II WORK OF THE COMMISSION SINCE THE THIRTY-FOURTH SESSION | | |
| A. Activities of subsidiary bodies | 3 | |
| B. Other activities | 4 - 5 | |
| C. Relations with specialized agencies and other organizations | 6 | |
| III THIRTY-FIFTH SESSION OF THE COMMISSION | | |
| A. Attendance and organization of work | 7 - 19 | |
| B. Agenda | 20 | |
| C. Account of proceedings | 21 - 35 | |
| Review of the economic situation in Europe | 21 - 36 | |
| The Commission's activities and implementation of priorities in 1979 | } | |
| and | | |
| 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 | 37 - 62 | |
| Resolutions bearing on the work of the Commission adopted by the Economic and Social Council and the General Assembly | 63 - 65 | |
| Commission's contribution to the United Nations programmes designed to assist developing countries | 66 - 68 | |

CONTENTS (continued)

| | <u>paragraphs</u> | <u>page</u> |
|--|-------------------|-------------|
| Co-operation with other international organizations | 69 - 72 | |
| Concentration and integration of the Commission's programmes of work | 73 - 87 | |
| Work of the Principal Subsidiary Bodies of the Commission | 88 - 241 | |
| Committee on Agricultural Problems | 89 - 95 | |
| Chemical Industry Committee | 96 - 104 | |
| Coal Committee | 105 - 119 | |
| Conference of European Statisticians | 120 - 131 | |
| Committee on Electric Power | 132 - 145 | |
| Committee on Gas | 146 - 157 | |
| Committee on Housing, Building and Planning | 158 - 167 | |
| Inland Transport Committee | 168 - 180 | |
| Senior Advisers to ECE Governments on Environmental Problems | 181 - 187 | |
| Senior Advisers to ECE Governments on Science and Technology | 188 - 194 | |
| Senior Economic Advisers to ECE Governments | 195 - 205 | |
| Steel Committee | 206 - 213 | |
| Timber Committee | 214 - 230 | |
| Committee on the Development of Trade | 231; 242-258 | |
| Committee on Water Problems | 232 - 241 | |
| Development of trade and industrial co-operation | 242 - 258 | |
| Follow-up action to the relevant Commission decisions: | | |
| High-level Meeting, within the Framework of the ECE, on the Protection of the Environment | 259 | |
| Energy | 260 - 283 | |
| Increased effectiveness in use of ECE resources | 284 | |
| International co-operation in the pharmaceutical industry | 285 | |
| Co-operation in the field of science and technology | 286 - 287 | |
| Long-term economic trends and development of international co-operation | 288 - 289 | |
| Multilateral system for the notification of laws and regulations concerning foreign trade and changes therein (MUNOSYST) | 290 | |

CONTENTS (continued)

paragraphs page

CHAPTER

| | |
|---|-----------|
| Commission's contribution to the preparatory work for the World Conference of the United Nations Decade for Women, 1980 | 291 - 294 |
| Co-operation in the field of new technologies of coal extraction and utilization | 295 - 296 |
| ECE follow-up to the United Nations Water Conference | 297 |
| Economic co-operation in the Mediterranean in the light of the Final Act of the CSCE | 298 - 305 |
| Standardization | 306 - 312 |
| Automation | 313 - 319 |
| Engineering Industries | 320 - 335 |
| Recommendations by the Sessional Committee and action taken thereon by the Plenary | 336 - 342 |
| Programme of work for 1980-1984 | 343 - 346 |
| Other business | 347 - 349 |
| Adoption of the Annual Report of the Commission | 350 - 351 |

IV

RESOLUTION AND OTHER DECISIONS ADOPTED BY THE THIRTY-FIFTH SESSION OF THE ECONOMIC COMMISSION FOR EUROPE

* * *

ANNEXES

- I. Statements of financial implications of actions and proposals of the Commission
- II. List of meetings of the Commission's subsidiary bodies held in 1979/1980
- III. Publications and documents issued by the Commission

VOLUME II

V

| | |
|---------------------------------------|---|
| PROGRAMME OF WORK FOR 1980-1984 | 1 |
|---------------------------------------|---|

CHAPTER V

PROGRAMME OF WORK FOR 1980-1984

Introduction

The Commission's programme of work for 1980-1984, as considered and approved at the thirty-fifth 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> |
|--|---|
|--|---|

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 programme 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-fifth session the Commission adopted its resolution 1 (XXXV) 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

| <u>Estimated duration (in years)</u> | <u>Estimated termination year</u> |
|--|---|
|--|---|

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. Recalled that the Final Act of the CSCE provides for the continuation of the multilateral process initiated by the Conference by organizing, inter alia, follow-up meetings among the representatives of the participating States of the CSCE, further recalled that the participating States have decided at the Belgrade Meeting that the second of these meetings will be held in Madrid commencing Tuesday, 11 November 1980, and requested the Executive Secretary to inform the Madrid meeting, if invited to do so by the participating States, of the progress made in the ECE on the implementation of the relevant provisions of the Final Act as well as of the possibilities open to the Commission for contributing further to the implementation of the Final Act, and following that, to report as appropriate to the thirty-sixth session;

4. Noted the holding of the "Scientific Forum" of the CSCE, which took place in Hamburg from 18 February to 3 March 1980, as well as the contributions made by the Executive Secretary;

5. 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;

6. Noted the Executive Secretary's report E/ECE/989, and 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;

7. Expressed the readiness of the member States to attach full attention to the preparations for the special session of the General Assembly;

8. Requested the Executive Secretary to contribute effectively to preparations for the special session of the General Assembly;

| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

9. Requested the Executive Secretary to participate actively in the further development of the United Nations Medium-term System-wide Planning in the light of General Assembly resolution 34/224 and other relevant General Assembly and Economic and Social Council resolutions;

10. Noted with satisfaction the Commission's contribution to the preparatory work for the World Conference of the United Nations Decade for Women which will take place in Copenhagen in July 1980 and requested the Executive Secretary to submit to the Conference his report and the report of the Seminar on the Participation of Women in the Economic Evolution of the ECE Region which was held in Paris in July 1979;

11. Noted with appreciation the efforts already under way by the secretariat (as described in E/ECE/988, pages 4 and 5) to the preparatory activities for the United Nations Conference on New and Renewable Sources of Energy and requested the Executive Secretary to respond fully as appropriate to the requirements in the General Assembly resolutions 33/148 and 34/190;

12. Noted with satisfaction the adoption, during the High-level Meeting, within the Framework of the ECE, on the Protection of the Environment, which took place in Geneva from 13 to 15 November 1979, of the Convention and Resolution on Long-Range Transboundary Air Pollution and the Declaration in the field of low- and non-waste technology and re-utilization and recycling of, wastes, stressed the desirability of early ratification of the Convention, endorsed the decisions adopted by the Senior Advisers to ECE Governments on Environmental Problems at their eighth session to implement the important results of the High-level Meeting without delay, further endorsed the priorities established in the new ECE programme of work on environmental problems, which will give new impetus to the work of the Commission in the field of environment, and noted the Executive Secretary's expressed intention to provide secretariat resources adequate for the implementation of the programme of work in this field;

13. Adopted the Declaration of Policy on Prevention and Control of Water Pollution including Transboundary Pollution, and commended the Committee on Water Problems for the successful work in its preparation;

Estimated
duration
(in years)

Estimated
termination
year

14. 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;

15. Drew to the attention of member Governments decision E (XXXV);

16. Reiterated the suggestion in resolution 1 (XXXIV) 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;

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

18. Approved its programme of work for 1980/81 and endorsed in principle, subject to review at its thirty-sixth session, its long-term programme of work for 1980-1984;

19. Noted with satisfaction the progress achieved so far with a view to increasing the effectiveness in methods of work and in use of ECE resources and the measures described by the Executive Secretary in his report E/ECE/995 in implementation of decision E (XXXIV) and requested the Executive Secretary to continue his efforts in this direction; and

20. Requested the Executive Secretary to transmit the present resolution as well as the other decisions of the thirty-fifth 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. Energy

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

(a) Decided to establish on an ad hoc basis a new Principal Subsidiary Body entitled "Senior Advisers to ECE Governments on Energy" and established a mandate for this body; and

| | |
|-------------------------------------|----------------------------------|
| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|

(b) 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.

At its thirty-fifth session the Commission adopted its decision E (XXXV) in which it:

1. Noted the Executive Secretary's report E/ECE/994 and the reports of the first and second sessions of the Senior Advisers to ECE Governments on Energy (ECE/ENERGY/2 and 4) and confirmed the conclusions adopted and the decisions taken by the Senior Advisers to ECE Governments on Energy;
2. Approved, subject to review at its thirty-sixth session, the draft programme of work on general energy problems as drafted during the second session of the Senior Advisers to ECE Governments on Energy and contained in Annex I to document E/ECE/994 as well as the calendar of meetings mentioned in Annex II of the same document (see programme category 01 (b));
3. Requested the Senior Advisers to ECE Governments on Energy to continue their activities according to the terms of their mandate under decision B (XXXIV) on the understanding that all its elements should receive due attention;
4. Requested the Executive Secretary to prepare with the assistance of experts recommended by members and appointed by the secretariat the report foreseen in subparagraph (4) of paragraph 32 of document ECE/ENERGY/4 so that the third session of the Senior Advisers to ECE Governments on Energy which should take place two or three months after distribution of that report could be convened as soon as possible; and
5. Requested the Executive Secretary to report to the thirty-sixth session on the implementation of this decision.

01.1.4. Economic co-operation in the Mediterranean in the light of the Final Act of the CSCE

Description: In accordance with Commission decisions B (XXXII), G (XXXIII) and Q (XXXIV), 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, bearing in mind the relevant sections of the report of the Valletta Meeting; and will intensify

| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

co-operation with other competent international organizations on subjects of common interest to the Mediterranean countries.

At its thirty-fifth session the Commission adopted its decision J (XXXV) by which it:

1. Took note of the Executive Secretary's report E/ECE/1003 on economic co-operation in the Mediterranean in the light of the Final Act of the CSCE, and the encouraging response from Mediterranean countries as well as from the Economic Commissions for Africa and Western Asia;
2. Requested the Executive Secretary to continue to co-operate with the secretariats of the Economic Commission for Western Asia and the Economic Commission for Africa and other relevant United Nations bodies and to pursue his contacts with all Mediterranean countries not members of the Commission, on subjects within the competence of the ECE of common interest to the Mediterranean countries;
3. Recommended to its subsidiary bodies to identify areas of interest for economic co-operation in the Mediterranean within the framework of over-all ECE activities and its programme of work; and
4. Requested the Executive Secretary to prepare for the thirty-sixth session a report on the implementation of this decision.

01.1.5. 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 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;

| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

- 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.

At its thirty-fifth session the Commission adopted its decision A (XXXV) in which it:

1. Invited the Principal Subsidiary Bodies to ensure that the programme of work of the Commission with regard to environment is carried out in close co-operation with each other;
2. Welcomed the restructuring of the work programme of the Senior Advisers on Environmental Problems aimed at streamlining their work;
3. Requested the Senior Advisers to ECE Governments on Environmental Problems to continue and to strengthen their efforts to review at their annual sessions ECE activities and programmes related to the environment, taking into account the revised Declaration of Policy on Prevention and Control of Water Pollution, including Transboundary Pollution, in close co-operation with the other Principal Subsidiary Bodies, and to prepare specific suggestions and recommendations for consideration by the Commission in accordance with paragraph 7 of their terms of reference;
4. Decided to select activities in the field of economic projections as the next major topic to be considered in depth from the point of view of concentration, integration and co-ordination;
5. Encouraged member Governments to make fuller use of the opportunities offered by the review of concentration and integration of the programme of work in the selected sector for streamlining and directing the programme of work as a whole;
6. Requested the Executive Secretary when preparing his report on concentration and integration in the selected sector for the thirty-sixth session to pay particular attention to possible improvements which may be brought to the programme of work in this respect;
7. Invited the Principal Subsidiary Bodies to submit concrete proposals on ways to improve co-ordination and co-operation among themselves by, for example:

| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

(a) examining further possibilities for organizing their work jointly with other Principal Subsidiary Bodies in areas of common interest as a means of avoiding unnecessary duplication;

(b) examining means of strengthening the consultative process among themselves so that they may benefit from each others' views and advice before final decisions are reached, without provoking unnecessary delays; and

8. Requested the Executive Secretary to inform the Principal Subsidiary Bodies of the contents of this decision and to report to the thirty-sixth session on its implementation.

01.1.6. 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.

01.1.7. 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.

01.1.8. International co-operation in the pharmaceutical industry

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

01.1.9. ECE Declaration of policy on prevention and control of water pollution, including trans-boundary pollution

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

| | |
|-------------------------------------|----------------------------------|
| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|

1. Decided to adopt the Principles on prevention and control of water pollution, including transboundary pollution set forth in the appendix to that decision, which complete and develop the Principles contained in the 1966 Declaration;
 2. Recommended to ECE Governments that they consider the possibility of applying these Principles in formulating and carrying out their water policies and in their international co-operation;
 3. Invited the member Governments to report in depth to the Commission at three year intervals, through the Committee on Water Problems, on the action taken by them in this regard;
 4. Requested the Executive Secretary to transmit that decision to the member Governments as a Declaration of policy on prevention and control of water pollution, including transboundary pollution;
 5. Requested the Executive Secretary to transmit that decision to the organizations concerned with a view to extending international co-operation in this field.
- 01.1.10. The work of the Committee on Water Problems - The revised Declaration of policy on prevention and control of water pollution, including transboundary pollution - proposal for monitoring and evaluation of transboundary water pollution

Description: At its thirty-fifth session the Commission adopted its decision C (XXXV) in which it:

1. Requested the Committee on Water Problems to consider in its activities the implications of the adoption of the "Declaration of Policy on Prevention and Control of Water Pollution, including Transboundary Pollution", in order that the principles included therein receive further consideration;
2. Decided to reiterate its invitation for closer co-operation between the Senior Advisers to ECE Governments on Environmental Problems and the Committee on Water Problems and urgently requested the latter to consider the feasibility of setting up a project in co-operation with the Senior Advisers for the monitoring and evaluation of transboundary water pollution, taking into account the activities of UNEP, WHO, as well as other international organizations in that field, in order to avoid duplication; and
3. Requested the Executive Secretary to report to the Commission at its thirty-sixth session on the progress achieved in the implementation of this decision.

| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

01.1.11. Engineering industries and automation

Description: At its thirty-fifth session the Commission adopted its decision M (XXXV) in which it:

1. Decided to dissolve the Working Party on Automation and to create a new permanent body to be called the "Working Party on Engineering Industries and Automation";
2. Recommended that this new body include into its programme of work those specific sectors of activity which were covered within the framework of the Ad hoc Meeting of Experts on Engineering Industries and the Working Party on Automation and to present its draft programme of work to the thirty-sixth session of the Commission;
3. Decided to convene the first session of this new Working Party prior to the thirty-sixth session of the Commission; and
4. Requested the Executive Secretary to report to the thirty-sixth session of the Commission on the application of this decision.

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.

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.

| <u>Estimated duration (in years)</u> | <u>Estimated termination year</u> |
|--|---|
|--|---|

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 Over-all 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 Over-all Economic Perspective up to 1990.

At its thirty-fifth session the Commission adopted its decision G (XXXV) by which it decided:

- (a) To express its satisfaction with the steps taken by the Senior Economic Advisers to ECE Governments and the Committee on the Development of Trade to adapt their work programmes in order to improve their work on long-term prospects for growth and international co-operation; and
- (b) To invite all Principal Subsidiary Bodies concerned to continue to co-operate with the Senior Economic Advisers to ECE Governments on the identification of long-term economic trends and possibilities for development of international co-operation.

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 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.

cont.

| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

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

Description: At its thirty-fifth session the Commission adopted its decision I (XXXV) by which it decided:

- (a) To express its satisfaction with the steps taken by the Coal Committee to intensify co-operation in the field of new technologies in coal extraction and utilization, and in particular with the work and results of the Symposium on the Gasification and Liquefaction of Coal held at Katowice (Poland) in April 1979;
- (b) To request the Coal Committee to continue consideration of the concept of creating an ECE Co-ordinating Centre on Coal Gasification and Liquefaction.

01.2.6. Promotion of trade and industrial co-operation
in the ECE region

Description: At its thirty-fifth session the Commission adopted its decision D (XXXV) by which it:

1. Invited member Governments to devote efforts to expanding intra-regional trade, to endeavour to reduce or progressively eliminate all kinds of obstacles to trade and further to improve economic information; and
2. Requested the Committee on the Development of Trade to contribute further to the achievement of these objectives.

01.2.7. Co-operation in the field of science and technology

Description: At its thirty-fifth session the Commission adopted its decision F (XXXV) in which it:

1. Took note of the report by the Executive Secretary on co-operation in the field of science and technology (E/ECE/997) and the report of the Senior Advisers to ECE Governments on Science and Technology on their eighth session (ECE/SC.TECH./19);
2. Confirmed the importance of scientific and technological co-operation within the ECE;
3. Reaffirmed the importance it attached to the activities of the Senior Advisers to ECE Governments on Science and Technology and approved their programme of work as presented in Annex I to document ECE/SC.TECH./19;
4. Invited the Principal Subsidiary Bodies of the Commission to consider further practical projects in their programme of work relevant to the scientific and technological co-operation in the ECE region;

| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

5. Requested the Executive Secretary to inform the new Intergovernmental Committee for Science and Technology for Development of the interest and willingness of the Commission to co-operate fully and actively in the follow-up action of the Vienna Programme of Action and the work of the Committee, and action envisaged under paragraph 8 below;

6. Invited the Executive Secretary to provide the Secretary General of the United Nations with all material and information on the work of the Commission in the field of science and technology which might be useful for the preparation of his basic study mentioned in the preamble of this decision;

7. Requested the Executive Secretary to prepare proposals for the consideration of the Senior Advisers to ECE Governments on Science and Technology at their ninth session on possible contributions which the ECE might make to the follow-up to the United Nations Conference on Science and Technology for Development; as agreed to by the Senior Advisers at their eighth session (ECE/SC.TECH./19, paragraph 78 (c));

8. Requested further that in the interim the Executive Secretary should take steps towards the implementation of the Vienna Programme of Action by, inter alia, disseminating the results of the ECE studies, and bringing ECE meetings which might be of particular interest for developing countries to their attention; and

9. Requested furthermore the Executive Secretary to present to the thirty-sixth session of the Commission a report on the implementation of this resolution and the progress report referred to in paragraph 6(c) of document E/ECE/997.

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

| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

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.

01.3.2. The Commission's contribution to the preparatory work for the World Conference of the United Nations Decade for Women, 1980

Description: At its thirty-fifth session the Commission adopted its decision H (XXXV), by which it decided:

- (a) To take note of the Executive Secretary's report E/ECE/1000, the report of the Seminar on the Participation of Women in the Economic Evolution of the ECE Region held in Paris (France) in July 1979 (ECE/SEM.5/9) and of the study of the Economic Role of Women in the ECE Region prepared by the secretariat for submission to the World Conference of the United Nations Decade for Women, 1980; and
- (b) To request the Executive Secretary to assess changes in the economic role of women within the ECE region in conjunction with other research activities of the secretariat.

01.3.3. 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,

| <u>Estimated duration (in years)</u> | <u>Estimated termination year</u> |
|--|---|
|--|---|

inter alia, that enumerated in paragraph 37 of the document E/ECE/965 submitted to the thirty-fourth session of the Commission.

01.3.4. 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 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.

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-fifth session, the Commission adopted its decision N (XXXV) (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 1980/1981

| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

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 Meeting 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 the ECE Governments on the long-term economic prospects for the ECE Region

Description: The ad hoc Meeting will consider and comment on the over-all long-term economic prospects in its specific sector for the perspectives to be prepared by the Senior Economic Advisers to the ECE Governments.

Method of work: The secretariat will prepare, as appropriate, the necessary documentation concerning engineering industries for examination and will assist the ad hoc Meeting in carrying out its work on this project.

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 |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

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. The first of such annual reviews to be prepared by the end of 1980. To maintain continuity a second up-dating to 1970 of the Main Statistical tables of the study Role and Place of Engineering Industries in National and World Economies will be made, and The Analytical Part, updated to 1975, should be issued by the secretariat as soon as possible.

cont.

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

01(a).3.1 Present use and prospects for precision instruments in engineering industries

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 fourth collection of information and this will form the basis of another circulation of material to ECE member countries and the analysis of it will be presented to the Seminar on this topic to be held in the German Democratic Republic in 1982 at the invitation of this country; the Preparatory Meeting to be convened in due time. In addition, the next ad hoc Meeting of Experts on Engineering Industries will consider the implementation of the Hungarian proposal concerning medical instruments.

01(a).3.2 Techno-economic aspects of the international division of labour in the automobile industry (including production sharing, especially East-West connections in this field)

Description: The ad hoc Meeting of Experts on Engineering Industries will study techno-economic aspects of the international division of labour in the automobile industry and promote the exchange of information.

| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

Methods of work: A seminar on this topic will take place in Poland in 1981 at the invitation of the Government of this country. A Preparatory Meeting should be convened in July 1980. A study will be undertaken at a later stage, taking into account work done under the auspices of other ECE bodies.

01(a).3.3 Innovation in engineering industries:
techno-economic aspects of fabrication
processes and quality control

Description: Bearing in mind the importance of innovation for all branches of the engineering industries, the ad hoc Meetings 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 be held in Turin (Italy), from 9 to 13 June 1980.

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 Meetings 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: The study on this subject should be continued on the basis of material submitted to the above-mentioned Seminar with the help of experts from interested countries. An ad hoc Meeting for this study should be convened in July 1980 and the draft presented to the Ninth 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

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 year |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

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.

Methods of work: The study should be continued and the third ad hoc Meeting of Experts be held in July 1980 to consider the final draft in time to issue it before the end of 1980.

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 Statistics in co-operation with the Conference of European Statisticians. cont.

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 and the Working Party on Automation, will continue to collect and regularly publish export 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

| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

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.

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 means of a joint meeting under the aegis of the ad hoc Meeting of Experts on Engineering Industries, the Working Party on Automation and in co-operation with the Conference of European Statisticians. The secretariat was entrusted to continue further work on a regular basis, such as the elaboration of a list of statistical problems concerning engineering industries to be presented to an ad hoc Meeting on Statistics concerning Engineering Industries and Automation jointly sponsored with the Working Party on Automation to be held in March 1980. cont.

II. LIST OF TOPICS FOR ACTION AT A DATE TO BE DECIDED

Selected Economic and Technological Problems

- (a) Production of engineering equipment for preventing pollution (concentrating on problems associated with water)

Description: The ad hoc Meetings of Experts on Engineering Industries will continue to study present and future trends of engineering equipment for preventing pollution, concentrating on problems associated with water, as a follow-up to the study Production of Engineering Equipment for Preventing Pollution and the Techno-economic Efficiency of such Equipment. It is expected that exchange of experience and information will lead to better identification of problems and help ECE member Governments seek appropriate solutions.

Methods of work: A study will be prepared by the secretariat with the help of government rapporteurs and will be brought to the attention of the Senior Advisers to ECE Governments on Environmental Problems, as a sectoral contribution. This project to be taken into consideration when studies at present under preparation are completed.

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

Description: The exchange of information on the technological and economic aspects of the protection of engineering goods operating under difficult climatic conditions should be promoted, new technologies reviewed and their influence on the export of such goods analysed.

Methods of work: Studies on selected problems might be prepared by the secretariat with the help of government rapporteurs or, whenever appropriate, through convening seminars on their specific aspects.

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

Description: The techno-economic aspects of corrosion prevention should be studied with a view to promoting an interdisciplinary approach to the problem and rationalizing the use of available information. Due attention should 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 may be organized to cover new developments in this field. Co-operation with the secretariats of other international governmental and non-governmental organizations specializing in this topic should be established.

(d) Measures for promoting the efficiency of energy production by improving engineering equipment

Description: The ad hoc Meetings of Experts on Engineering Industries will study the techno-economic aspects of advanced techniques for improving the efficiency of engineering equipment for energy production and will inform the ECE Principal Subsidiary Bodies concerned.

Methods of work: A study and/or a seminar will be prepared by the secretariat with the help of government rapporteurs.

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

Description: The ad hoc Meetings of Experts on Engineering Industries, in co-operation with the Working Party on Automation, should 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 may 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.

(f) Low waste processes and automated equipment for production of precision castings by engineering industries

Description: Low waste processes and automated equipment for the production of precision castings by engineering industries should be studied as a follow-up to the Seminar on Engineering Equipment for Foundries and Advanced Methods for Producing such Equipment; new technologies and methods of work will be reviewed, and their efficiency assessed by the exchange of national experiences.

Methods of work: The secretariat was requested to assess the interest of countries for this topic.

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

Description: 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 should be considered.

Methods of work: The secretariat was requested to assess the interest of countries for this topic.

- (h) 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 exchange of information on techno-economic developments in the production of intermediate engineering products should be promoted, new technologies 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.

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

Description: The exchange of information on problems of mechanization and automation of hard manual work in engineering industries should be promoted, new technologies and methods of work 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.

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

Description: Problems facing the labour-intensive sectors of engineering industries should be considered 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, should also be examined in order to assist member Governments in formulating policies and establishing an integrated approach to these problems.

Methods of work: Work should proceed through studies prepared by the secretariat with the help of government rapporteurs or, whenever appropriate, through convening seminars on specific aspects.

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

Description: The ad hoc Meetings 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.

(l) International and intra-regional co-operation, including means for the transfer of technology in the field of engineering industries

Description: Contribute to better understanding of the problems related to international and intra-regional co-operation and try to find ways for the practical transfer of technology in the field of engineering industries, in co-operation with the interested bodies of the Commission.

Methods of work: A seminar and/or a study will be made, with the help of government rapporteurs.

(m) Harmonization of technical requirements for medical instruments and encouragement of joint-production of such products

Description: The problems of harmonizing technical requirements for medical instruments, the encouragement of joint-production of such products and the fostering of common research in this field should be studied and the results brought to the attention of the ECE interested bodies.

Methods of work: The next ad hoc Meeting of Experts on Engineering Industries should review this project and recommend how best to implement it.

(n) Economic, ecological and legal consequences of agro-aviation activities; including new achievements and the outlook regarding aeronautical equipment for spraying in agriculture and forestry, aquatic control, and protection of the environment and public health; and influence of operational demands on the choice of techno-economic parameters for flying equipment used in agriculture, forestry and aquatic control

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; to study the scientific and technical problems associated with 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; to 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: Seminars and/or studies will be made, with the help of government rapporteurs, at a date and place to be determined later.

01 (b) - GENERAL ENERGY PROBLEMS

Note: At its thirty-fifth session, the Commission adopted its decision E (XXXV) (for the text see Chapter IV above) in which it approved the following programme of work in the field of general energy problems.

| | Estimated duration (in years) | Estimated termination year |
|---|-------------------------------------|----------------------------------|
| <u>WORK AREA 01(b).1: ENERGY PROGRAMMES, POLICIES AND PROSPECTS</u> | | |
| (a) Review of national energy programmes, policies and prospects | | cont. |
| (b) Exchange of information, views and experience on selected general energy problems | | cont. |
| (c) Integration of environmental objectives into energy policies | | cont. |
| (d) Review of work in ECE on medium-term and long-term trends and prospects in the energy field | | cont. |

Description: Pursuant to operative paragraph 2(a) of decision B(XXXIV) the Senior Advisers will "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".

Method of work: These activities will take place on the occasion of meetings and seminars convened by the Senior Advisers. The exchanges of views will be based on information transmitted by Governments, and on secretariat studies.

With regard to project component (a), the secretariat will make a report to the third session of the Senior Advisers in accordance with the decision contained in paragraph 32 of the report of their second meeting (ECE/ENERGY/4).

Under project component (b), the Senior Advisers would consider, as appropriate, specific problems which are not dealt with elsewhere in the programme.

The Senior Advisers will deal with project component (c) at their regular sessions, taking into account the special competence of the Senior Advisers to ECE Governments on Environmental Problems and of the Committee on Water Problems in this area.

| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

With regard to project component (d), the 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 on secretariat studies.

WORK AREA 01(b).2: ENERGY DEMAND AND SUPPLY

- | | | |
|---|-------|------|
| (a) Consideration of significant new developments affecting energy demand and supply in the short, medium and long term | cont. | |
| (b) Development of comprehensive ECE energy demand/supply balances for past and future years | cont. | |
| (c) Analysis of the role of specific energy sources in over-all energy programmes | cont. | |
| (d) Evaluation of capital requirements | 2 | 1981 |
| (e) Appraisal of the potential for new and renewable sources of energy | cont. | |
| (f) Assessment of the comparative merits of centralized and decentralized energy supply strategies | 2 | 1982 |

Description: The Senior Advisers will consider problems and factors affecting the short-, medium- and long-term energy balances of the ECE region, as well as perspective developments.

Method of work: These activities will take place on the occasion of meetings or seminars convened by the Senior Advisers. The exchanges of views will be based on information transmitted by Governments and on secretariat studies.

With regard to project component (a), the Senior Advisers will review significant developments affecting demand and supply at their annual sessions.

Project component (b) will be dealt with in co-operation with the Senior Economic Advisers to ECE Governments and the Conference of European Statisticians, taking into account the results of project component 1(a) (questionnaire on past and future developments).

In project component (c), the Senior Advisers will focus on the role of specific forms of energy in over-all balances, in co-operation particularly with the Coal Committee, Committee on Gas and Committee on Electric Power.

| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

In project component (d), the Senior Advisers will deal with investment needs and financing issues of the energy sector (suppliers as well as consumers) and co-operate with the Senior Economic Advisers on macro-economic implications.

When dealing with project component (e), the Senior Advisers may wish to take into account the holding of the Seminar on New Energy Sources, organized by the Senior Advisers to ECE Governments on Science and Technology at Jülich (Federal Republic of Germany) from 8 to 12 December 1980, which constitutes an input into the United Nations Conference on New and Renewable Sources of Energy to be held in 1981.

Project component (f) will be dealt with at a symposium, to be held in Yugoslavia, the modalities of which have to be determined, possibly at a preparatory meeting.

WORK AREA 01(b).3: ENERGY TRADE AND CO-OPERATION

- | | | |
|--|-------|------|
| (a) Review of energy trade and co-operation | cont. | |
| (b) Surveys of energy trade and co-operation agreements | 2 | 1982 |
| (c) Identification and analysis of energy projects suitable for international co-operation | cont. | |

Description: The Senior Advisers will examine the actual, anticipated and potential trade in energy of ECE countries. The potential for supplementing traditional trade by new forms of international co-operation in the field of energy will also be examined.

Method of work: The Senior Advisers will deal with this project at their sessions and at seminars, in close co-operation with other Principal Subsidiary Bodies concerned.

With regard to project component (a), the Senior Advisers at their annual sessions will review the actual situation and prospects of energy trade and co-operation, particularly east-west energy trade and co-operation.

Project component (b) will be implemented through up-dating and further analysis of east-west trade and co-operation agreements, utilizing information contained in document ENERGY/R.6/Add.1 and additional information available to the secretariat.

| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

Under project component (c), the Senior Advisers may consider specific energy projects suitable for international co-operation with a view to undertaking a study and analysis of such projects. A Seminar on "Problems and opportunities of east-west energy trade and co-operation", in co-operation with the Committee on the Development of Trade, could be held.

WORK AREA 01(b).4: ENERGY CONSERVATION

- | | | |
|---|-------|------|
| (a) Analysis of national energy conservation policies and programmes | cont. | |
| (b) Specific measures for energy conservation | | |
| (i) Improved extraction, processing and rational utilization of energy | 1 | 1980 |
| (ii) Economic and rational utilization of energy resources in all energy-intensive sectors by development and application of new technologies | ... | ... |
| (iii) Future methods of substitution for oil by other primary or secondary forms of energy | ... | ... |
| (c) Review of work done or planned in the ECE framework relating to energy economy and efficiency | cont. | |

Description: The Senior Advisers will undertake periodic exchanges of information and views on measures adopted and envisaged to achieve greater energy economy and efficiency, as well as on the results of these measures; they will also undertake periodic reviews of work done or planned in ECE in this field.

Method of work: The reviews will take place on the occasion of ad hoc meetings and seminars convened by the Senior Advisers to ECE Governments on Energy, as appropriate in co-operation with other Principal Subsidiary Bodies.

Project component (b)(i) will be dealt with by the Seminar on Improved Techniques for the Extraction of Primary Forms of Energy, in Vienna (Austria), 10-14 November 1980.

Project component (b)(ii) could be implemented by the proposed seminar on rational utilization of secondary forms of energy in the economy, particularly in industry, as well as additional seminars and secretariat studies.

Project component (b)(iii) will be elaborated in a study by the secretariat and further activities will be developed following completion of the study.

* * *

01(c) - STANDARDIZATION

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

| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

WORK AREA 01(c).1: INTERNATIONAL HARMONIZATION OF STANDARDS AND TECHNICAL REGULATIONS

01(c).1.1. International and national developments and prospects

Description: 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.

Method of work: 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. Harmonization of standards and technical regulations

Description: Identification of concepts and problems.

Method of work: 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. Identification of sectors which are of interest to ECE Governments with a view to a programme of work for international standardization

Description: 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.

Method of work: 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.

| | Estimated duration (in years) | Estimated termination year |
|---|-------------------------------------|----------------------------------|
| 01(c).1.4. <u>Identification of problems in the fields of international standardization and certification</u> | | |
| <u>Description:</u> Review of problems brought to the attention of Government Officials by ECE member Governments, other international organizations and/or ECE subsidiary bodies. | | |
| <u>Method of work:</u> 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. <u>Preparation and implementation of recommendations</u> | | |
| <u>Description:</u> Formulation of new recommendations on standardization and certification policies (Work areas 1 and 2). Periodic reviews of the implementation of adopted recommendations. | | |
| <u>Method of work:</u> 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. <u>Impact of standardization and certification on international trade</u> | | |
| <u>Description:</u> 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. | | |
| <u>Method of work:</u> 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 |

| <u>Estimated duration (in years)</u> | <u>Estimated termination year</u> |
|--|---|
|--|---|

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 |
|---|------|

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 Government 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-fifth session, the Commission adopted its decision L (XXXV) (for the text see Chapter IV above) in which it approved the following programme of work in the field of automation.

| | Estimated duration (in years) | Estimated termination year |
|--|-------------------------------------|----------------------------------|
| WORK AREA 01(d).1: <u>MEDIUM- AND LONG-TERM PERSPECTIVES</u> | | |
| 01(d).1.1 <u>The prospective medium- and long-term impact of automation on the economy as a whole and on individual industrial branches in particular</u> | | |
| <u>Description:</u> 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. | | |
| <u>Method of work:</u> 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 <u>Technological perspectives in automation</u> | | |
| <u>Description:</u> 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. | | |
| <u>Method of work:</u> 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 |
|-------------------------------------|----------------------------------|

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

01(d).2.1 Review of developments 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 countries of the ECE region, within the context of general economic developments including developments taking place in microcomputers and computer aided design (CAD).

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: A Seminar will be held in Geneva in 1981 and a preparatory meeting will be held in due time to consider the scope and tentative programme for this Seminar, prepared by the secretariat on the basis of a detailed outline for this project suggested by the Hungarian delegation.

1

1981

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 invitation of the Ukrainian SSR, the Working Party agreed to hold a Seminar on Automation of Welding.

Method of work: This Seminar will be held in Kiev (Ukrainian SSR), from 13 to 17 October 1980.

1

1980

| | Estimated duration (in years) | Estimated termination year |
|---|-------------------------------------|----------------------------------|
| <p>01(d).3.2 <u>The production and use of automation equipment in the member countries of the ECE which are developing from the economic point of view</u></p> <p><u>Description:</u> 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.</p> <p><u>Method of work:</u> The secretariat will circulate the proposal made by the delegation of Yugoslavia to governments asking them to define their interest in this topic and in what form they would be willing to participate and co-operate in its implementation. The secretariat will review the current activities of other United Nations bodies in this field. Any further steps will be decided at the next session of the Working Party.</p> | 3 | 1983 |
| <p>01(d).3.3 <u>Analysis of the introduction of new production methods in engineering as related to the man-machine-management system</u></p> <p><u>Description:</u> 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.</p> <p><u>Method of work:</u> It was agreed that this project could be dealt with in a seminar which is tentatively scheduled for 1982.</p> | 1 | 1982 |
| <p><u>WORK AREA 01(d).4: ENVIRONMENTAL AND RESOURCE-SAVING PROBLEMS</u></p> | | |
| <p>01(d).4.1 <u>Application of automation for monitoring the environment</u></p> <p><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.</p> <p><u>Method of work:</u> The Working Party will co-operate with other principal subsidiary bodies in this field (Senior Advisers to ECE Governments on Environmental Problems).</p> | 1 | 1981 |

| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

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 define 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 ad hoc Meeting of Experts on Engineering Industries and eventually with the Conference of European Statisticians will continue work on the revision of the commodity composition of the Bulletin of Statistics on World Trade in Engineering Products to include equipment related to automation and on an improved methodological basis for the assessment of automation.

cont.

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. The secretariat will report to the thirty-second session on the availability of material and the possibility of undertaking a study on protein-rich feedingstuffs. | | |
| <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. | | |
| | 3 | 1980 |
| 02.1.2. <u>Co-operation with the Senior Economic Advisers on long-term trends and perspectives</u> | | |
| <u>Description:</u> Without engaging in any long-term projections of its own, the Committee will, whenever the occasion arises, make available to the Senior Economic Advisers its comments on their work on long-term trends and perspectives as far as they relate to agriculture and as far as countries consider such comments necessary. | | |
| <u>Method of work:</u> The secretariat will inform the Committee of relevant documentation for its examination. | | |
| | cont. | |

| <u>Estimated duration (in years)</u> | <u>Estimated termination year</u> |
|--|---|
|--|---|

- 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: Pending the decisions to be taken by the Committee after FAO's Regional Conference for Europe (1980) and the fourth session of the FAO/ECE Working Party on Agrarian Structure and Farm Rationalization (1981).

Method of work: [Pending the decisions of 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 policy and a statistical 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.

*/ See also project 02.3.1.1.

| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

Method of work: For each selected commodity a report, intended to serve as background document for discussion, will be produced by the secretariat in two parts, i.e. a text part with a short summary followed by a concise presentation (of 10 to not more than 15 pages) of major market developments, and a separate statistical annex (this new presentation to be used on an experimental basis for the thirty-second session).

cont.

02.2.3. Commodity problems of special interest to the member countries of the ECE which are developing from the economic point of view

Description: The Committee will select appropriate commodity problems concerning these countries (including the island countries) for consideration. A draft annotated outline for a study of production outside the usual growing season in temperate zones, prepared by a government rapporteur, will be submitted to the thirty-second session.

Method of work: [Pending the decisions of the Committee.] cont.

02.2.3.1. Market outlook for flowers and ornamental plants

Description: 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.

Method of work: 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 in May 1980.

3

1980

02.2.4. Special activities aimed at promoting and facilitating international trade */

02.2.4.1. Standardization of perishable produce

(a) Elaboration of new UN/ECE standards

| | | |
|--|---|------|
| (i) Dry and dried produce (apricots and figs) | 4 | 1981 |
| (ii) Poultry meat | 4 | 1983 |
| (iii) Egg products | 7 | 1984 |
| (iv) Fresh and chilled salt water fish | 4 | 1984 |

*/ 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 year |
|--|-------------------------------------|----------------------------------|
| (b) Revision and publication of UN/ECE standards | | |
| (i) Revision | cont. | |
| (ii) Publication of agricultural and horticultural standards | 1 | 1981 |
| (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 publish and disseminate new and existing standards; 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: 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. 5 1984

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. Role of the development of appropriate industries and services (including tourism) in promoting the agricultural development in less-favoured areas

Description: Subject selected by the FAO/ECE Working Party on Agrarian Structure and Farm Rationalization as follow-up action to the symposium on problems of agricultural development in less-favoured areas and as topic of special interest to southern European countries.

*/ 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.

| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

Method of work: Round-table discussion at the fourth session with contributions from all participating countries (with a special invitation by the Working Party to those of southern Europe) on regional programmes and policies in this field and on their effects as well as advantages or shortcomings.

2

1981

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

Description: 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.

Method of work: Discussion at the fourth session of the Working Party on the basis of case studies prepared by government rapporteurs.

2

1981

02.3.1.3. Economics of alternative agricultural production

Description: Subject selected by the Working Party to review various possibilities of alternative production (e.g. using no chemical inputs, livestock production under natural conditions, etc.).

Method of work: Round-table discussion at the fifth session with contributions from all participating countries.

2

1982

02.3.1.4. Economic and social aspects of the rational use of natural resources

Description: A detailed outline (drafted by a government rapporteur) for the national reports to be prepared for this topic will be discussed and finalized at the fourth session of the Working Party.

Method of work: Discussion at the fifth session of the Working Party on the basis of case studies prepared by government rapporteurs.

2

1982

| | Estimated duration (in years) | Estimated termination year |
|--|-------------------------------------|----------------------------------|
| 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 | 4 | 1980 |
| (b) Biogas Production from Organic Agricultural Wastes | 3 | 1980 |
| (c) Changes and Trends in the Quantity and Balance of Energy Consumption in Agriculture | 2 | 1981 |
| (d) Review of Existing Technological Processes in the Mechanization of Crop Production in Order to Reduce Energy Consumption | 2 | 1981 |
| 02.3.2.3. Work on terminology (Terms and definitions on soil preparation) | 5 - 6 | 1982 - 1983 |
| 02.3.2.4. Reports on more specific technical problems | | |
| (a) Technology of Storage and Mechanization of Work in Vegetable Store-Houses | 3 | 1980 |
| (b) Methods and Equipment for the Mechanization of Harvesting, Storing and Using Crop By-Products | 3 | 1980 |
| (c) Methods and Mechanical Equipment for Increasing the Nutritive Value of Straw | 3 | 1980 |
| (d) Methods and Machines for Deep Loosening of Soil | 2 | 1981 |
| (e) Methods and Equipment for the Mechanization of Agricultural Work on Sandy Soils | 2 | 1981 |

*/ 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.

| | <u>Estimated duration (in years)</u> | <u>Estimated termination year</u> |
|--|--|---|
| 02.3.2.5. Annotated outlines of reports proposed for inclusion in the work programme | | |
| (a) Technical Aspects Including the Use of Computers Contributing to Optimal Utilization of Agricultural Machinery | 4 | 1980 |
| (b) The Use of Electronics and Microprocessors for the Control of Agricultural Machinery and Equipment | 1 | 1980 |
| (c) Design of Agricultural Machinery from the Point of View of Human Engineering | 1 | 1980 |
| (d) Modern Tillage Techniques and Implements | 1 | 1980 |
| (e) Mechanization of Sunflower Production | 1 | 1980 |
| (f) Use of Solar Energy in Agriculture | 1 | 1980 |
| 02.3.2.6. Present and Foreseeable Trends in the Mechanization of Agriculture (Horizon 1990) (Preparation of national reports and a synthesis report) | 2 | 1980 |

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.

02.3.3. Marketing problems relating to agricultural products

02.3.3.1. The role of co-operation (in the form of co-operatives and in other forms) in agricultural and food marketing

Description: 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.

Method of work: Symposium to be held in Geneva. 2 1980

| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

02.3.3.2. Catering

Description: Concrete proposals will be prepared by the secretariat in consultation with ECE countries and will be submitted to the thirty-second session for consideration.

Method of work: Symposium.

| | |
|---|------|
| 5 | 1982 |
|---|------|

02.3.4. Selected technological and economic problems relating to land use, soil fertility and crop production

02.3.4.1. Methods of combating erosion, recultivating land and improving soil quality

Description: 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.

Method of work: Technical report prepared by a government rapporteur (or rapporteurs) on the basis of material supplied by countries in reply to a questionnaire.

| | |
|---|------|
| 5 | 1981 |
|---|------|

02.3.4.2. Triticale

Description: Review of national research and experience relating to triticale and the improvement of its yields, quality, resistance to diseases, cold and drought.

Method of work: Technical report prepared by a government rapporteur (or rapporteurs) on the basis of material supplied by countries in reply to a questionnaire.

| | |
|---|------|
| 3 | 1981 |
|---|------|

02.3.4.3. Maize

Description: Discussion in depth of all aspects relating to the production, technology and consumption of maize.

Method of work: Symposium to be organized by and in Yugoslavia.

| | |
|---|------|
| 1 | 1980 |
|---|------|

02.3.4.4. New developments in the field of fertilizers

Description: The subject or subjects to be discussed will be decided on the basis of the government replies to a circular letter listing the topics proposed by the preceding fertilizer symposium.

Method of work: Symposium to be held in Geneva.

| | |
|---|------|
| 2 | 1983 |
|---|------|

| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

02.3.4.5. Problems of land use and land-use planning

Description: Pending the decisions to be taken by the Committee. A draft annotated outline for a technical report on the legal aspects of preserving agricultural land in agriculture, prepared by a government rapporteur, will be submitted to the thirty-second session.

Method of work: [Pending the decisions of the Committee.]

02.3.5. Selected technological and economic problems relating to animal production and feedingstuffs */

02.3.5.1. Genotype X keeping conditions, animal welfare and protection

Description: 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.

Method of work: Technical report(s) prepared by government rapporteurs on the basis of material supplied by countries in reply to a questionnaire (or questionnaires).

3

1981

02.3.5.2. Feeding methods

Description: Study of the feeding methods in large livestock farms and of the possible diets best adapted to intensive production.

Method of work: Technical report prepared by government rapporteurs on the basis of material supplied by countries in reply to a questionnaire (or questionnaires).

3

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

Description: 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.

*/ See also project 02.4.2. (water pollution from animal production).

| | Estimated duration (in years) | Estimated termination year |
|--|-------------------------------------|----------------------------------|
| <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 02.4.2.; and submitted to the Committee for in-depth discussion. | 2 | 1982 |
| 02.3.6. <u>Studies of particular interest to the member countries of the ECE developing from the economic point of view (including island countries)</u> | | |
| <u>Description:</u> As far as appropriate, the special interests of the member countries of the ECE developing from the economic point of view are to be taken into account in all projects appearing above under <u>Work Area 02.3.</u> */ 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. | | |
| <u>Method of work:</u> [Pending the decisions of the Committee.] | cont. | |

*/ See, for instance, project 02.3.1.1.

| | Estimated duration (in years) | Estimated termination year |
|--|-------------------------------------|----------------------------------|
| <u>WORK AREA 02.4: ENVIRONMENTAL PROBLEMS RELATING TO AGRICULTURE</u> | | |
| 02.4.1. <u>Environmental problems relating to agricultural mechanization */</u> | | |
| 02.4.1.1. The Role of Agricultural Mechanization in Preserving the Environment in Hilly and Mountainous Areas | 4 | 1980 |
| 02.4.1.2. Cleaning, Handling and Drying of Poultry Manure | 3 | 1980 |
| <u>Description:</u> All studies listed under project 02.4.1. are selected by the FAO/ECE Working Party on Mechanization of Agriculture and approved by the Committee. | | |
| <u>Method of work:</u> 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. <u>Water pollution from animal production</u> | | |
| <u>Description:</u> 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. | | |
| <u>Method of work:</u> Seminar organized jointly with the ECE Committee on Water Problems. | | |
| | 2 | 1981 |
| 02.4.3. <u>Study on pollution problems in agriculture</u> | | |
| <u>Description:</u> The Committee will decide on specific subjects under this project at a later date. | | |
| <u>Method of work:</u> [Pending the decisions of the Committee.] | | |

*/ See also project 02.3.2.

| | |
|-------------------------------------|----------------------------------|
| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|

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 and corresponding balances (by the joint secretariats); further work on income and outlay accounts and capital formation accounts (by the joint secretariats). | 4 | 1980 |
| (b) Review and updating of earlier recommendations on statistics and balances for meat and milk; completion of work on production and utilization statistics of other products (potatoes, sugar beets, sugar, oilseeds, oil crops and oil); meeting of the Study Group. | 2 | 1981 |
| (c) 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. | 5 | 1980 |
| (d) 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.

| | <u>Estimated duration (in years)</u> | <u>Estimated termination year</u> |
|---|--|---|
| (e) 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 |
| (f) Preparation of a glossary of terms used in agricultural statistics in the working languages of the region. | 3 | 1982 |
| (g) 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> |
|--|---|
|--|---|

WORK AREA 03.1: MEDIUM AND LONG-TERM PERSPECTIVES

03.1.1 Prospects for the Development of Carbo-chemistry in the ECE Region

Description: 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.

Method of work: A task force developed the scope of the study and a questionnaire to be used for obtaining the statistical information. An ad hoc meeting of experts will consider the first draft of the study in late 1980.

2

1981

03.1.2 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 foods, 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

03.1.3 Co-operation with the Senior Economic Advisers to the ECE Governments on the long-term economic prospects for the ECE Region

Description: The Committee will consider and comment on the over-all long-term economic prospects in its specific sector for the perspectives to be prepared by the Senior Economic Advisers to the ECE Governments.

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.

cont.

| <u>Estimated duration (in years)</u> | <u>Estimated termination year</u> |
|--|---|
|--|---|

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.

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.

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.

| <u>Estimated duration (in years)</u> | <u>Estimated termination year</u> |
|--|---|
|--|---|

03.2.3 Trade in Chemical Products among ECE member countries

Description: The Committee will study trade, economic and technological developments in the chemical industry. Particular emphasis will be given to forms of international co-operation such as counterpurchases and buy-back arrangements, their importance in international trade will be analysed.

Method of work: An ad hoc Meeting of Experts will review the first draft of the study which will be prepared on the basis of statistical information collected by means of a questionnaire agreed upon by the Group of Experts on the Periodic Survey.

| | |
|---|------|
| 2 | 1982 |
|---|------|

WORK AREA 03.3: SELECTED ECONOMIC AND TECHNOLOGICAL PROBLEMS

03.3.1 Management and Management Information Systems in the Chemical Industry

Description: The purpose of this project is to explore in depth problems of management and management information systems in the chemical industry.

Method of work: A seminar will be held on 22-26 September 1980 in Varna (Bulgaria) at the invitation of the Bulgarian Government. Details of the objectives and scope of the seminar have been determined by the Preparatory Meeting for the Seminar which was held on 5-6 June 1979.

| | |
|---|------|
| 1 | 1980 |
|---|------|

03.3.2 The influence of environmental protection measures on the development of pesticide production and consumption

Description: The Committee will analyse the present state of production and consumption of various types of pesticides, and the ways of using them that will best safeguard the environment.

Method of work: An ad hoc Meeting of Experts will formulate the outline and the methods of work to be used for this project.

| | |
|---|------|
| 2 | 1982 |
|---|------|

| | Estimated duration (in years) | Estimated termination year |
|--|-------------------------------------|----------------------------------|
| 03.3.3 <u>Automation of technological processes in the Chemical Industry</u> | | |
| <u>Description:</u> The Chemical Industry ranks among the most highly automated industries. The importance of automation is increasing, because of its potential for saving raw materials and energy. These and other aspects are to be studied. | | |
| <u>Method of work:</u> A Seminar has been tentatively scheduled for 1981 in Geneva. Objectives and the scope of the Seminar will be determined by a Preparatory meeting to be held in 1980. | 1 | 1981 |
| 03.3.4 <u>Fertilizers required to meet soil, crop and other conditions of developing countries</u> | | |
| <u>Description:</u> 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. | | |
| <u>Method of work:</u> Will be decided when study is initiated. | 3 | 1984 |
| <u>WORK AREA 03.4: SELECTED ENVIRONMENTAL AND RESOURCE-SAVING PROBLEMS</u> | | |
| 03.4.1 <u>The rational use of crude oil and its derivatives as raw material for the Chemical Industry</u> | | |
| <u>Description:</u> The Committee will examine the rational use of crude oil and its derivatives as a raw material for the Chemical Industry. | | |
| <u>Method of work:</u> A Seminar has been tentatively scheduled for 1982 in Czechoslovakia. Objectives and the scope of the Seminar will be determined by a Preparatory meeting to be held in 1981. | 1 | 1982 |
| 03.4.2 <u>Use as chemical raw materials of natural products (cellulose) or those from the sea</u> | | |
| <u>Description:</u> Against the background of the rising cost of traditional chemical raw materials, the Committee will explore the possibilities of alternative sources. | | |
| <u>Method of work:</u> To be defined when work is initiated. | 2 | 1983 |

| <u>Estimated duration (in years)</u> | <u>Estimated termination year</u> |
|--|---|
|--|---|

03.4.3 Use of chemical treatment for reducing
atmospheric pollution by sulphur oxide and
gaseous pollutants in general

Description: 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.

Method of work: To be determined when work is initiated possibly in co-operation with the Senior Advisers to the ECE Governments on Environmental Problems.

| | |
|---|------|
| 2 | 1985 |
|---|------|

03.4.4 Study of the noxious effects of specific chemical
substances, such as polyvinylchloride

Description: Within the framework of the Committee's activities on the discharge of toxic substances specific case studies will be examined.

Method of work: To be determined when work is initiated.

| | |
|---|------|
| 2 | 1984 |
|---|------|

03.4.5 Current pollution standards in the fertilizer
industry

Description: 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.

Method of work: To be determined when work is initiated.

| | |
|---|------|
| 2 | 1983 |
|---|------|

WORK AREA 03.5: STATISTICS AND INFORMATION

03.5.1 Bulletin of imports and exports in chemical
products

Description: 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.

Method of work: The secretariat will collect the requisite information from available United Nations statistical sources and publish an Annual Bulletin of Trade in Chemical Products, covering exports and imports of chemical products.

cont.

| <u>Estimated duration (in years)</u> | <u>Estimated termination year</u> |
|--|---|
|--|---|

03.5.2 Development of internationally comparable
statistics and statistical classification

Description: 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 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

| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

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 for 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 role of coal in supplying the ECE region with energy and raw materials, in the light of new techniques of coal conversion and utilization

2

1981

Method of work: Project component 04.1.1.1. will be examined by the Committee 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, which took place at Katowice (Poland) from 23 to 27 April 1979.

04.1.2. 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, particularly through its Working Party on Coal Trade, will consider and comment on the Overall Economic Perspective prepared by the Senior Economic Advisers to ECE Governments and make available to them the results of its work on the relevant projects (e.g. 04.1.1. and 04.2.2.), for use in their work.

| <u>Estimated duration (in years)</u> | <u>Estimated termination year</u> |
|--|---|
|--|---|

Method of work: The secretariat will prepare the documentation which the Committee will need for the study and assist the Committee in its work in accordance with decision G (XXXII).

2

1979

WORK AREA 04.2: CURRENT DEVELOPMENTS AND PROSPECTS,
INCLUDING INTERNATIONAL TRADE

04.2.1. Review of the short-term fluctuations in
demand for and supply of solid fuels

Description: The Committee will follow demand/supply fluctuations closely with a view to avoiding or attenuating 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.

04.2.1.3. Transport and transmission problems connected with the development of "distant" coalfields

3

1980

Method of work: Project components 1 and 2 will be considered once 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.

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 and its prospects

cont.

| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

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 replies by Governments to a questionnaire. Reports of particular relevance to the activities of the Senior Economic Advisers to ECE Governments will be made available to them for information and use in their work.

04.2.3. Coal utilization in selected consumption sectors

Description: The purpose of this project is to improve 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 through studies or symposia under the auspices of the Working Party on Coal Trade, in close co-operation with the other Principal Subsidiary Bodies concerned.

WORK AREA 04.3: SELECTED ECONOMIC AND TECHNOLOGICAL PROBLEMS

04.3.1. Productivity in underground coal mining

Description: The purpose of this project is to enhance industrial co-operation and technology transfer in underground mining through exchanges of information and experience on advanced mining technologies. While this work is mainly concerned with technical matters, due account will be taken of related management problems, labour productivity, production costs, environmental implications, etc. Major problems considered will be:

| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

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 | 3 | 1981 |
| (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 | 2 | 1980 |
| (d) Exchange of experience in coal extraction under buildings and industrial plants | 2 | 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 |
|---|---|------|

04.3.1.3. Concentration of production

- | | | |
|---|-------|--|
| (a) Concentration indices in European coal industries | cont. | |
|---|-------|--|

04.3.1.4. Possibilities for improved utilization of coal reserves to increase the economic efficiency of coal extraction.

Method of work: 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.

| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

04.3.2. Economic and technical problems linked with the further development of opencast mining

Description: The purpose of this project is to promote and develop exchanges of views and experience 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:

04.3.2.1. Use of heavy-duty equipment in opencast mines.

cont..

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

3

1979

(b) Development of cyclical/line production systems in opencast coalmining

3

1981

04.3.2.4. Problems concerning repair and operation of mine transport equipment. Technology and methods of mechanizing repair work

3

1981

04.3.2.5. 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

2

1980

04.3.2.6. Better use of available coal resources and increased economy and efficiency of coal extraction techniques, as well as increased environmental protection in opencast coal mines (see also 04.4.1.3)

2

1980

04.3.2.7. Mechanization of ancillary processes in opencast coalmining

3

1982

| | Estimated duration (in years) | Estimated termination year |
|--|-------------------------------------|----------------------------------|
| (a) Development of forms of integrated mechanization in the case of conveyor transport; | | |
| (b) Mechanization of ancillary work in the case of rail transport; | | |
| (c) Mechanization of ancillary work in the case of combined transport and transport by lorry. | | |
| 04.3.2.8. Ways and means of dewatering opencast coal mines, particularly at great depth or in difficult mining conditions. | 3 | 1982 |
| <u>Method of work:</u> The project will be implemented by the Group of Experts on Opencast Mines. | | |
| 04.3.3. <u>International co-operation on research and development projects</u> | | |
| <u>Description:</u> 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 research and development 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 coal face; present development and future prospects | 2 | 1980 |
| (b) Application of automation to coal-haulage systems | 2 | 1980 |
| (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 might begin at the fifth session of the Meeting of Directors | 2 | 1982 |

| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

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 research and development institutes and study tours to coal-fields. Selected problems will be the subject of symposia organized in close co-operation with the other subsidiary bodies 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

cont.

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 |
|---|------|

04.3.4.3. Selected problems of coal preparation and use

- (a) Mechanization and automation of coal preparation plants
- (b) Preparation of brown coals according to their various applications; automation and mechanization of such processes
- (c) Fluidized-bed combustion
- (d) Household use of coal and of solid fuels manufactured from coal
- (e) Use of coal for long-distance heating of towns and cities

| | |
|---|------|
| 2 | 1980 |
| 2 | 1980 |
| 2 | 1980 |
| 2 | 1981 |
| 3 | 1982 |

| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

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, in accordance with the operative part of ECE decision O (XXXIV), the Committee will continue "to consider the concept of the creation of the ECE Co-ordinating Centre on Coal Gasification and Liquefaction and its possible status". The Committee is invited to adopt a programme of work on the subject. It will ensure close co-operation with the Chemical Industry Committee, the Committee on Gas, the Senior Advisers to ECE Governments on Environmental Problems and any other Principal Subsidiary Bodies concerned. As regards the other project components, the Group of Experts will undertake studies along agreed lines: 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 classifications,
standards and certifications

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

04.3.5.1. Preparation of an ECE classification of coals; method of preparing the classification; ways and means of promoting co-operation in this area between ECE countries and other interested countries

Dates to be fixed

Method of work: This project component is assigned to the Group of Experts on the Utilization and Preparation of Solid Fuels. The Coal Committee is called upon to take a decision on the programme of work on the basis of the recommendations of the Ad hoc Meeting held on the subject from 21 to 23 February 1979 (COAL/AC.5/2).

| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

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 third seminar on desulphurization of fuels and combustion gases to be organized by the Senior Advisers to ECE Governments on Environmental Problems in 1980. Project component 3 is related to project 04.3.2.6., to be implemented by the Group of Experts on Opencast Mines. The Committee will ensure close co-operation with other 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 information and experience, the Committee will seek to promote more careful utilization of scarce natural resources and to reduce the technical and economic constraints which have hitherto curbed efficiency. The following problems will be considered:

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

4

1980

04.4.2.2. Symposium on the use of waste from coal working and preparation

dates to be fixed

| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

Method of work: Project component 1 will be considered, in respect of underground mining, 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 monographs which will be consolidated in 1980 into a general report. With regard to component 2, the Committee will wish to examine the possibilities for organizing such a symposium and fix the venue and dates.

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 making 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.

Method of work: Project component 1 will be implemented by the Meeting of Directors of National Mining Research Institutes (see also 04.3.3.). The Committee will establish, where needed, close co-operation with the Principal Subsidiary Bodies concerned with industrial co-operation.

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 considerable increase expected 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 this transfer.

cont.

| | |
|-------------------------------------|----------------------------------|
| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|

Method of work: The Committee will take account, in the execution of its work programme, of the needs of countries with newly-developed coal industries by participating, for example, in international events such as the Symposium on World Coal Prospects (Poland, 1979).

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 publish them in its Quarterly and Annual Bulletins, in conformity 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 ECE coal industries, with particular reference to international comparability of accounting methods

cont.

04.6.2.2. Use of computers in solving the ECE 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

04.6.2.4. Statistical methods of recording and analysing working time at mechanized coal faces in order to minimize lost time

| | Estimated duration (in years) | Estimated termination year |
|--|-------------------------------------|----------------------------------|
| 04.6.2.5. International definitions for the classification of different forms of coal for statistical purposes | 2 | 1980 |
| 04.6.2.6. Coal tonnage statistics by method of shipment | 2 | 1982 |
| 04.6.2.7. International comparability of numbers of surface workers at underground coal mines and their influence on productivity | 3 | 1981 |
| <u>Method of work:</u> The project will be implemented by the Group of Experts on Coal Statistics in co-operation with the Conference of European Statisticians. | | |
| 04.6.3. <u>Use of computers in the coal-mining industry</u> | | |
| <u>Description:</u> 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 | 4 | 1980 |
| <u>Method of work:</u> This project component is being implemented by the Group of Experts on the Utilization and Preparation of Solid Fuel (see 04.3.4.2.). | | |
| 04.6.4. <u>Exchange of non-statistical information</u> | | |
| <u>Description:</u> This project aims at facilitating contacts and access through the exchange of addresses, organizational charts, directories, bibliographies, work programmes, activity reports, etc. | | |
| 04.6.4.1. Addresses of government authorities and 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 concerning energy published by ECE | cont. | |

| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

04.6.4.4. Study tour of the Committee in the
United Kingdom

1

1980

Method of work: On the basis of a questionnaire prepared by the secretariat, the Committee will prepare and regularly update 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 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 concerning energy published by ECE. Bibliographies will be annexed to substantive reports. Under project component 4, the United Kingdom authorities will organize, in September 1980, a study tour of coal mines and institutes for representatives of the countries taking part in the work of the Committee.

05. - ENVIRONMENT

| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

WORK AREA 05.1: AIR POLLUTION PROBLEMS

05.1.1. Transboundary air pollution

05.1.1.1. Implementation of the Resolution on Long-range Transboundary Air Pollution

Description: Implementation of the Resolution on Long-range Transboundary Air Pollution, adopted by the High-level Meeting within the Framework of the ECE on the Protection of the Environment, held in Geneva from 13 to 15 November 1979, and the provisional implementation of the Convention on Long-range Transboundary Air Pollution.

Method of work: The Senior Advisers at their eighth session requested the Executive Secretary to convene, within the framework of the Senior Advisers to ECE Governments on Environmental Problems, an Interim Executive Body with the mandate to be responsible for the implementation of the resolution on Long-range Transboundary Air Pollution adopted by the High-level Meeting, and the provisional implementation of the Convention pending its entry into force. The Interim Executive Body will be composed of the signatories to the Convention. All other member countries of ECE, as observers, as well as Governments and organizations participating in the work of the Commission under articles 8, 11, 12 and 13 of the Commission's terms of reference, will be entitled to participate in meetings of the Interim Executive Body. Since the Interim Executive Body will function within the framework of the Senior Advisers to ECE Governments on Environmental Problems, the rules of procedure of the Commission will apply, taking into account the provisions of article 14 of the Convention. The Interim Executive Body will co-operate with the Working Party on Air Pollution Problems and use the Steering Body of the co-operative programme for monitoring and evaluation of the long-range transmission of air pollutants in Europe. The Senior Advisers on Environmental Problems decided that decisions taken by the Interim Executive Body will enter into force as soon as the Interim Executive Body has adopted them. However, the Senior Advisers on Environmental Problems will receive reports on the Interim Executive Body's activities and can comment on them and take appropriate decisions.

cont.

| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

05.1.1.2. Co-operative programme for monitoring and evaluation of the long-range transport of air pollutants

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 levels, taking into account international implications of these levels. The information on the deposition and concentrations 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 United Nations Economic Commission for Europe and forms part of the Global Environmental Monitoring System of the United Nations Environment Programme. It is being implemented in co-operation with the World Meteorological Organization. The programme is supervised by a Steering Body made up of representatives from participating countries. Representatives of the United Nations Environment Programme and the World Meteorological Organization will participate in the meetings. The Steering Body is responsible for all matters related to the effective implementation of the programme and reports to the Senior Advisers through its Working Party on Air Pollution Problems.

cont.

05.1.2. Development of guidelines for the control of emission 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. Guidelines for the following processes are being prepared: primary aluminium, secondary aluminium, primary and secondary lead smelters, primary copper smelters, secondary copper smelters, zinc concentrated preparation, zinc smelting.

Method of work: A task force under the leadership of the Federal Republic of Germany has been established consisting of experts from 11 countries. The final version of the guidelines was agreed in principle at an informal

| | Estimated duration (in years) | Estimated termination year |
|--|-------------------------------------|----------------------------------|
| meeting in November 1979, and will be submitted to the tenth session of the Working Party on Air Pollution Problems for final consideration and endorsement. | 7 | 1981 |
| 05.1.3. <u>Development of guidelines for the control of emissions from the inorganic chemical industry</u> | | |
| <u>Description:</u> 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, chlorine and inorganic pigment industries. | | |
| <u>Method of work:</u> A task force under the leadership of the Netherlands is carrying out the work. | 3 | 1983 |
| 05.1.4. <u>Problems of odours</u> | | |
| <u>Description:</u> 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 different countries (e.g. definitions, measurements, control techniques, costs, etc.). | | |
| <u>Method of work:</u> A Task Force has been established, consisting of experts from a number of ECE countries, with Poland as lead country, to carry out the project. On the basis of the work of the Task Force a Seminar on the Problems of Odours may be organized. | 6 | 1982 |
| 05.1.5. <u>Economic assessment of environmental damage caused by air pollution</u> | | |
| <u>Description:</u> A common methodology for assessing the environmental damage of air pollution will be developed. | | |
| <u>Method of work:</u> The activities are being carried out by the Task Force, headed by the USSR. The third meeting of the Task Force will be held on 18 and 19 March 1980 and will consider a draft final report of the group to be presented to the ninth session of the Senior Advisers on Environmental Problems. | 4 | 1981 |
| 05.1.6. <u>Desulphurization of fuels and combustion gases</u> | | |
| <u>Description:</u> In order to review the recent developments of desulphurization technology a third seminar on the desulphurization of fuels and combustion gases will be organized by the Working Party on Air Pollution Problems. Steps will be taken to ensure the co-operation of the Coal Committee. | | |

| | Estimated duration (in years) | Estimated termination year |
|--|-------------------------------------|----------------------------------|
| <p><u>Method of work:</u> At the invitation of the Government of Austria, the seminar will be held in Salzburg from 18 to 22 May 1981. In connexion with the seminar, a study tour will be organized in the Federal Republic of Germany.</p> | 2 | 1981 |
| <p>05.1.7. <u>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</u></p> | | |
| <p><u>Description:</u> Under the auspices of WHO/EURO and the 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.</p> | | |
| <p><u>Method of work:</u> A draft of the manual is being elaborated by the Association of Engineers of the Federal Republic of Germany (Verein Deutscher Ingenieure (VDI)). The draft will be completed and submitted for consideration by WHO experts and the Working Party on Air Pollution Problems in 1980.</p> | 5 | 1981 |
| <p>05.1.8. <u>Review and analysis of the existing situation and prospects with regard to the prevention of air pollution</u></p> | | |
| <p><u>Description:</u> 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.</p> | | |
| <p><u>Method of work:</u> 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.</p> | cont. | |

| | |
|-------------------------------------|----------------------------------|
| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|

WORK AREA 05.2: RESOURCES AND WASTE PROBLEMS

05.2.1. Low- and Non-waste Technology and Re-utilization and Recycling of Wastes

Description: The Declaration on Low- and Non-waste Technology and Re-utilization and Recycling of Wastes, adopted by the High-level Meeting within the Framework of the ECE on the Protection of the Environment recommends international co-operative activities within the framework of the ECE related, inter alia, to research and development, exchange of scientific and technical information, international waste exchanges as well as organization of international post-graduate courses on low- and non-waste technology and re-utilization and recycling of wastes.

Method of work: The Senior Advisers to ECE Governments on Environmental Problems at their eighth session established a Working Party on Low- and Non-waste Technology and Re-utilization and Recycling of Wastes, to be entrusted with the development of organizational, scientific and technical questions related to the implementation of the Declaration, and invited it to prepare, at its first session in Spring 1980, its draft terms of reference in the light of provisions made in paragraph 6 of the Declaration, for consideration by the Senior Advisers at their ninth session. cont.

05.2.1.1. Preparation of a compendium on low- and non-waste technologies

Description: With the support of UNEP the project would involve further development of the current compilation of a compendium on low- and non-waste technology with a view to setting up an international data bank for information on low- and non-waste technology and re-utilization and recycling of wastes, while fully respecting the need to protect proprietary information.

Method of work: For the compilation of the compendium, national focal points have been designated and the third meeting of experts will be held in November 1980. 4 1982

05.2.1.2. Promotion of the development of methodologies for comparison and evaluation of various technologies

Description: The Senior Advisers on Environmental Problems will promote (with the support of UNEP) the development of activities related to the development

| | |
|-------------------------------------|----------------------------------|
| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|

of methodologies for the comparison and evaluation of various technologies to be developed with a view to elaborating a manual on this topic.

Method of work: This project is being carried out by a task force, with the German Democratic Republic as lead country. The second meeting of the task-force will be held in 1980.

| | |
|---|------|
| 3 | 1982 |
|---|------|

05.2.1.3. Incentives for the promotion of low- and non-waste technology and re-utilization and recycling of wastes

Description: Information will be exchanged on national experience concerning incentives for the promotion of low- and non-waste technology and re-utilization and recycling of wastes, with a view to listing incentives for the development of low- and non-waste technology, analysing practical experience in the use of incentives, investigating the social and economic impact of various incentives, initiation of studies on different types of incentives based on legislation, regulations and standards, and economic measures, etc.

Method of work: [To be decided by the Working Party on Low- and Non-Waste Technology and Re-utilization and Recycling of Wastes at its first session in 1980.]

05.2.1.4. International waste exchanges

Description: Information will be collected and analysed on the economic, technical, environmental and social impact of existing waste exchanges. An investigation will be carried out on possibilities of expanding the network of sub-regional waste exchanges and co-operation between national and sub-regional exchanges.

Method of work: [To be decided by the Working Party on Low- and Non-waste Technology and Re-utilization and Recycling of Wastes at its first session in 1980.]

05.2.1.5. 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.

| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

Method of work: [Further work to be decided by the Working Party on Low- and Non-waste Technology and Re-utilization and Recycling of Wastes at its first session in 1980, taking into account the draft terms of reference and a programme of work prepared for a task force headed by Italy.]

| | |
|---|------|
| 5 | 1981 |
|---|------|

05.2.1.6. Control of toxic wastes

Description: Consideration of policy measures for handling, control and discharge of toxic wastes. Works will be carried out concerning the main sources of toxic wastes, as well as the ways in which amounts of such wastes could be significantly reduced through the use, inter alia, of modified technology or techniques of recycling.

Method of work: [To be decided by the Working Party on Low- and Non-waste Technology and Re-utilization and recycling of Wastes at its first session in 1980.]

05.2.2. Environment and energy

Description: The Senior Advisers on Environmental Problems will consider environmental problems related to energy and will in particular contribute to the over-all ECE programme in the field of general energy problems.

Method of work: [To be decided by the Senior Advisers at their ninth session.]

cont.

05.2.3. Protection of flora, fauna and their habitats in the ECE region

Description: The Senior Advisers will ensure or contribute to the conservation, within the ECE region, of (a) migratory species; (b) endangered species of plants and animals; (c) the habitats of migratory and endangered species.

Method of work: Details are given under each project-component below.

05.2.3.1. International measures taken or which could be taken for protecting flora, fauna and their habitats

05.2.3.1.1. Evaluation of measures taken or under preparation

Description: The Senior Advisers will evaluate measures, especially legal instruments, taken or

| <u>Estimated duration (in years)</u> | <u>Estimated termination year</u> |
|--|---|
|--|---|

under preparation at the international level for the conservation of flora, fauna and their habitats.

Method of work: To be carried out by a Task Force with the Netherlands as lead country. International organizations concerned are invited to participate.

| | |
|---|------|
| 2 | 1981 |
|---|------|

05.2.3.1.2. Identification of endangered species

Description: The Senior Advisers will identify, on the basis of available information, endangered species whose protection would be strengthened by international co-operation within the ECE region.

Method of work: [To be decided by the Senior Advisers at their ninth session.]

| | |
|---|------|
| 2 | 1983 |
|---|------|

05.2.3.1.3. Applicability of existing instruments and programmes

Description: The Senior Advisers will recommend to member Governments the extent to which it would be desirable and feasible to extend the application of existing instruments and programmes and, if lacunae are identified, to consider new instruments or programmes.

Method of work: [To be decided by the Senior Advisers at their ninth session.]

05.2.3.2. Study on the possible promotion of a network of representative ecological areas

Description: The Senior Advisers will carry out a study on possible ECE activities for promoting a network of representative ecological areas, taking into account, inter alia, the UNESCO biosphere reserve programme and the network of biogenetic reserves of the Council of Europe.

Method of work: The study will be undertaken by a Task Force under the leadership of Sweden. International organizations concerned will also be invited to participate.

| | |
|---|------|
| 2 | 1981 |
|---|------|

| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

WORK AREA 05.3: POLICY AND MANAGEMENT PROBLEMS

05.3.1. Environmental policies and strategies in
ECE countries

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

Method of work: Based on agreed guidelines, the member
Governments will on a continuous basis exchange
information on changes in their environmental policies
and strategies as well as information on national
priority issues. Periodic reviews of environmental
policies and strategies in the ECE region will be
prepared in future at approximately five-year intervals
and these reviews could become regional contributions
from ECE to the comprehensive UNEP "State of the
Environment" reports. The next over-all review should
take place in 1985 as a contribution to UNEP 1987
global review. The SAEP decided to continue the
practice of in-depth discussion of a specific
environmental topic at each annual session. For the
ninth session of the Senior Advisers on Environmental
Problems this topic will be "environmental impact
assessment".

cont.

05.3.2. 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: The Senior Advisers on Environmental
Problems, at their eighth session, offered to
co-operate with the Senior Economic Advisers and asked
the secretariat to report at their ninth session on
possible further contributions to the elaboration of
over-all, long-term economic prospects for the ECE
region.

cont.

| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

05.3.3. Environmental impact assessment

Description: On the basis of the relevant recommendations on specific measures related to environmental impact assessment in the Final Act of the Conference on Security and Co-operation in Europe, and taking into account the recommendations of the Seminar on Environmental Impact Assessment (Villach, Austria, 1979) the Senior Advisers will study "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" in particular in connexion with transboundary problems.

Method of work: Continuing exchange of information and views on development of basic principles and methodological approaches in relation to environmental impact assessment will be carried out. At their ninth session the Senior Advisers will hold an in-depth policy debate on environmental impact assessment, including its connexion with transboundary problems. For that session the secretariat will prepare a review of methodological and procedural questions of EIA on the basis of information received from member countries (according to guidelines prepared by the secretariat in consultation with the Senior Advisers) and taking into account documentation and conclusions of the ECE Seminar on Environmental Impact Assessment, held in Austria in 1979. In the light of the policy debate, the Senior Advisers will decide on further activities in this field, including the possible organization of a seminar. cont.

05.3.4. System of environmental statistics

Description: The Senior Advisers, together with the Conference of European Statisticians, will develop a system of environmental statistics through (i) elaboration of concepts, definitions and classifications; (ii) study of statistical methodology; and (iii) 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 from 16 to 19 September 1980 in Warsaw (Poland).

| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

05.3.5. 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 are being carried out by a Task Force, with Yugoslavia as the lead country. The final report will be ready for consideration by the Senior Advisers at their ninth session.

| | |
|---|------|
| 5 | 1981 |
|---|------|

05.3.6. Selected environmental problems of tourism

Description: 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.

Method of work: The Senior Advisers will be kept informed by the secretariat of ECE activities in this field, in particular of those which could be undertaken by the Committee on Housing, Building and Planning.

| | |
|---|------|
| 4 | 1981 |
|---|------|

06. - ELECTRIC POWER

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

| | |
|-------------------------------------|----------------------------------|
| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|

Description: The Committee will examine from time to time the medium-term and long-term prospects of the electric power industry in the context of national and regional energy economics. It will study major emerging problems and trends affecting demand and supply in electricity, analyse and compare related policies and identify possibilities of 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. A Seminar will be held in London in October 1981.

cont.

06.1.3. 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 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.

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

1980

06.1.5. Co-operation with the Senior Economic Advisers to ECE Governments on the over-all 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 over-all economic perspective for the ECE region prepared by the Senior Economic Advisers to ECE Governments and draw their attention to the results of its own work in this field.

| | Estimated duration (in years) | Estimated termination year |
|---|-------------------------------------|----------------------------------|
| <u>Method of work:</u> 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: <u>Investment policies in the electric power industry</u> | | |
| <u>Description:</u> 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 the new economic conditions into account. | | |
| <u>Method of work:</u> A Seminar on the Medium-term and Long-term Prospects of the Electric Power Industry will be held in London in October 1981. In the first stage, certain points arising out of the Seminar will be considered by the Group of Experts on Problems of Planning and Operating Large Power Systems in a manner to be decided upon. | | |
| | 3 | 1982 |
| <u>WORK AREA 06.2: CURRENT DEVELOPMENTS</u> | | |
| 06.2.1. <u>Review of the electric power situation in the ECE region</u> | | |
| <u>Description:</u> The Committee 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. | | |
| | cont. | |
| 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. Quadrennial 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. | | |
| | cont. | |

| | |
|-------------------------------------|----------------------------------|
| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|

06.2.3. Selected statistical problems

Description: 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.

cont.

06.2.3.1. Method of accounting to be used, in global energy balances, for primary energy converted directly into electric power

Description: The purpose of this project is to determine the most suitable coefficients for the conversion of primary energy from various sources into electric power.

cont.

06.2.4. Preparation of a terminology suited to the needs of the Committee on Electric Power

Description: 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.

Method of work: The terminology will be prepared by the secretariat on the basis of the terminologies published by the following international organizations: CITEA, IEC, UCPTI, UNIPEDI and VEC.

2

1981

06.2.5. Problems raised by international standardization in the field of electric power

Description: The Committee and its subsidiary bodies will, at their sessions, examine subjects for which international standards should be formulated.

Method of work: The subjects selected will be transmitted to the International Electrotechnical Commission (IEC) through the Meeting of Government Officials Responsible for Standardization Policies.

cont.

WORK AREA 06.3: SELECTED TECHNOLOGICAL AND ECONOMIC PROBLEMS

06.3.1. Selected problems of conventional and nuclear thermal power stations

Description: The purpose of this project is to promote technology transfers through exchanges of information and experience on selected problems of conventional and nuclear thermal power stations.

| | Estimated duration (in years) | Estimated termination year |
|---|-------------------------------------|----------------------------------|
| <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 |
| 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> The Group of Experts on Electric Power Stations will examine a report to be prepared by government rapporteurs from Poland, on the basis of information transmitted by ECE countries, in co-operation with UNIPED and UCPTE. | 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> The Group of Experts on Electric Power Stations will examine a report to be prepared by government rapporteurs from the Federal Republic of Germany, on the basis of information transmitted by ECE countries, in co-operation with UNIPED and UCPTE. The reference year for data will be 1978. | 3 | 1981 |
| 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> The Group of Experts on Electric Power Stations will examine a report to 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 | 1982 |
| 06.3.1.2. Problems concerning the design, construction 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> The Group of Experts on Electric Power Stations will examine a report to be prepared by government rapporteurs from the USSR, which will serve as a model for the preparation of general information that will be useful for the compilation of a consolidated report. | 4 | 1983 |

| | Estimated duration (in years) | Estimated termination year |
|--|-------------------------------------|----------------------------------|
| 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> The Group of Experts on Electric Power Stations will examine a report to be prepared by government rapporteurs from Romania on the basis of information transmitted by ECE countries. | 3 | 1982 |
| 06.3.1.4. Recommended methods for improving the availability of large units at conventional and nuclear thermal power stations | | |
| <u>Method of work:</u> The Group of Experts on Electric Power Stations will examine a report to be prepared by government rapporteurs from Belgium on the basis of information transmitted by ECE countries. | 4 | 1981 |
| 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 fuels | | |
| <u>Method of work:</u> The Group of Experts on Electric Power Stations will examine a consolidated report to be prepared by government rapporteurs from Czechoslovakia on the basis of country reports from Czechoslovakia, France, the German Democratic Republic, the USSR and Yugoslavia. | 2 | 1980 |
| 06.3.1.6. Seminar on the Extraction, Removal and Use of Ash from Coal-fired Power Stations | | |
| <u>Method of work:</u> This Seminar will be organized by the Polish Government, in co-operation with the secretariat, from 16 to 20 September 1980 at Zakopane (Poland). | | |
| 06.3.1.7. Experience gained in the treatment of water and condensates in conventional and nuclear thermal power stations | | |
| <u>Method of work:</u> The Group of Experts on Electric Power Stations will consider a report prepared by government rapporteurs from Belgium. | 4 | 1983 |

| | <u>Estimated duration (in years)</u> | <u>Estimated termination year</u> |
|--|--|---|
| 06.1.3.8. Technical and economic problems involved in integrating large-capacity power stations into electric power systems | | |
| <u>Description:</u> The purpose of this project is to study the impact of the increased size of units on electric power generating systems. | | |
| <u>Method of work:</u> The Group of Experts on Problems of Planning and Operating Large Power Systems and the Group of Experts on Electric Power Stations will examine a study prepared by an informal meeting of government rapporteurs from Belgium, Czechoslovakia, France, the Federal Republic of Germany, Hungary and Turkey, at which the work of the two groups of experts will have been co-ordinated at the national level. | | |
| | 4 | 1982 |
| 06.3.2. <u>Selected problems of hydroelectric power stations</u> | | |
| <u>Description:</u> 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 on the basis of the documents submitted at the Athens Symposium in November 1979. | | |
| | 3 | 1981 |
| 06.3.2.1. Dynamic behaviour of pumped storage plants in electric power systems planning | | |
| <u>Description:</u> The purpose of this project is to study the possibility of assessing the influence of the dynamic characteristics of pumped storage plants on the functioning of an electrical system. | | |
| <u>Method of work:</u> The Group of Experts on Problems of Planning and Operating Large Power Systems will consider a report prepared by government rapporteurs from Italy, in which account is taken of technological and practical aspects. | | |
| | 3 | 1981 |

| <u>Estimated duration (in years)</u> | <u>Estimated termination year</u> |
|--|---|
|--|---|

06.3.2.1(a). Symposium on Prospects for the Use of
Hydroelectric Schemes under the New Energy
Conditions and on the related Problems

Method of work: This Symposium was organized by the
Greek Government in co-operation with the secretariat
from 5 to 8 November 1979 at Athens (Greece). The
recommendations of the Seminar will be examined by
the groups of experts in accordance with their
respective terms of reference and programmes of work.
The Committee will be informed of the results of their
work.

| | |
|---|------|
| 3 | 1981 |
|---|------|

06.3.2.2. Evaluation of Europe's hydroelectric
potential

Method of work: An informal meeting of experts from
France, Greece, Italy, Norway, Spain, Yugoslavia and
the USSR will be held in May to examine this problem,
taking into account the preliminary study submitted
by the Spanish delegation, as well as the
recommendations of the Athens Symposium.

| | |
|---|------|
| 4 | 1983 |
|---|------|

06.3.3.2. Technical and economic problems involved
in integrating large-capacity power
stations into electric power systems

Description: The purpose of this project is to study
the influence of increasing unit size on electric
power generating systems.

Method of work: The Group of Experts on Problems of
Planning and Operating Large Power Systems and the
Group of Experts on Electric Power Stations will
consider a study prepared by an informal meeting of
government rapporteurs from Belgium, Czechoslovakia,
France, the Federal Republic of Germany, Hungary and
Turkey, at which the work of two groups of experts was
co-ordinated at the national level.

| | |
|---|------|
| 4 | 1982 |
|---|------|

06.3.4. Selected problems of distribution of
electric power in rural areas

Description: 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.

Method of work: The project will be implemented by the
Group of Experts on Distribution and Rural Electrification
as indicated under each project component below.

| | |
|---|------|
| 4 | 1982 |
|---|------|

| | | Estimated duration (in years) | Estimated termination year |
|--|---|-------------------------------------|----------------------------------|
| 06.3.4.1. | Increased use of electricity in the rural sector and its effect on the development of distribution networks | | |
| <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. | | 3 | 1981 |
| 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 the development of technical progress in the operation of rural distribution networks, through exchanges of information and experience. | | | |
| <u>Method of work.</u> A report will be prepared by the government experts 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 the 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 peat-fired thermal power station for the supply of heat to horticultural enterprises (see project 06.6.1.9) | 4 | 1982 |

| <u>Estimated duration (in years)</u> | <u>Estimated termination year</u> |
|--|---|
|--|---|

Method of work: 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

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 with 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 on the topic might be held in the near future.

WORK AREA 06.4: INTERCONNECTION OF ELECTRIC POWER TRANSMISSION SYSTEMS

Description: The Committee will formulate 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.

5

1983

| | | Estimated duration (in years) | Estimated termination year |
|---|---|-------------------------------------|----------------------------------|
| 06.4.1. | <u>Questionnaire on the optimum structure of the European system</u> | | |
| <u>Description:</u> The purpose of this project is to study the replies to questionnaire EP/GE.2/R.32, which has been distributed by the secretariat. | | | |
| <u>Method of work:</u> The Group of Experts on Problems of Planning and Operating Large Power Systems will consider a working document prepared by experts from the USSR, the co-ordinating country, based on the suggestions of an editorial group composed of experts from France, Italy, Romania, the USSR and CMEA, which might meet towards the end of 1980. | | | |
| | | 3 | 1981 |
| 06.4.2. | <u>Optimum structures of the European system</u> | | |
| <u>Description:</u> The purpose of this project is to study optimum structures of the European system on the basis of the replies referred to under 06.4.1. | | | |
| <u>Method of work:</u> The Group of Experts on Problems of Planning and Operating Large Power Systems will consider a study to be prepared in accordance with the programme of work contained in document EP/GE.2/R.36. | | | |
| | | 4 | 1983 |
| 06.4.3. | <u>Transfers of electric power in central Europe (including bilateral and trilateral relations)</u> | | |
| <u>Description:</u> The purpose of this project is to promote the international interconnexion of electric power systems in this area of Europe. | | | |
| <u>Method of work:</u> The Group of Experts on Problems of Planning and Operating Large Power Systems, at its twelfth session in 1980, will review the method of work to be adopted. | | | |
| | | 2 | 1981 |
| 06.4.4. | <u>Interconnexion of the electric power transmission systems of the countries of eastern and western Europe by means of very long very-high-voltage lines</u> | | |
| <u>Description:</u> The purpose of this project is to study the possibilities of interconnecting the electric power systems of the countries of Eastern and Western Europe by means of very long high-voltage transmission lines. | | | |
| <u>Method of work:</u> The Group of Experts on Problems of Planning and Operating Large Power Systems will consider a report prepared by government rapporteurs from the USSR, by other interested countries and by international organizations. | | | |
| | | 3 | 1982 |

| | |
|-------------------------------------|----------------------------------|
| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|

06.4.5. 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.

Method of work: 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 set up by the Governments of Bulgaria, Greece, Romania, Turkey and Yugoslavia to deal with problems arising in the development of interconnexions among these countries. The Group of Experts on Problems of Planning and Operating Large Power Systems 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.

3

1982

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 generating system.

Method of work: The Group of Experts on Problems of Planning and Operating Large Power Systems will consider a report prepared by government rapporteurs from the Netherlands and Turkey on the basis of any necessary technical and practical considerations.

4

1982

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

Description: The purpose of this project is to devise methods, within the framework of the connexion of power systems, to deal with such problems as dispatching, remote control, automation, protection equipment, systems stability, etc. The main trends in these fields will be identified.

Method of work: The Group of Experts on Problems of Planning and Operating Large Power Systems will consider a report prepared by government rapporteurs from the Byelorussian SSR for discussion in 1980.

3

1981

| <u>Estimated duration (in years)</u> | <u>Estimated termination year</u> |
|--|---|
|--|---|

06.4.8. Map of high-voltage electric power networks

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

Method of work: An informal meeting is scheduled for 30 May with representatives of the Central Dispatching Office (Prague), UCPTE and UNIPED to study the harmonization of the various existing maps.

cont.

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 France and Romania will prepare reports for project components 06.5.1.2 and 06.5.1.1, respectively.

4

1982

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 ECE countries.

4

1982

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

| | Estimated duration (in years) | Estimated termination year |
|--|-------------------------------------|----------------------------------|
| 06.5.1.3. The rational use of electricity on selected farms and in low-voltage rural distribution networks | 4 | 1982 |
| <u>Method of work:</u> A study will be made by the Group of Experts on Distribution and Rural Electrification, taking into account information transmitted by ECE countries. | 4 | 1982 |
| 06.5.1.4. Measures adopted to reduce electric power losses in distribution networks and results obtained | | |
| <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. | 4 | 1981 |
| 06.5.1.5. Study of the applications of heat pumps in the industrial and tertiary sectors | | |
| <u>Method of work:</u> The Group of Experts on Distribution and Rural Electrification will consider a report prepared by the government experts from France, taking into account information to be provided by ECE countries. | | |
| 06.5.2. <u>Measures designed to save fuel in heat and electric-power production</u> | | |
| <u>Description:</u> 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>Method of work:</u> These projects 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 | 1982 |
| 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> The Group of Experts on Electric Power Stations will consider a report to be prepared by government rapporteurs from Romania on the basis of information transmitted by Governments | 3 | 1982 |

| | | Estimated duration (in years) | Estimated termination year |
|---|--|-------------------------------------|----------------------------------|
| 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> The Group of Experts on Electric Power Stations will examine a report to be prepared by government experts from the Federal Republic of Germany on the basis of information transmitted by ECE countries. | | 3 | 1982 |
| 06.5.2.3. | Economics of converting old condenser-type electric power stations into combined heat/power production stations | | |
| <u>Method of work:</u> The Group of Experts on Electric Power Stations will consider a report to be prepared by the government experts from Czechoslovakia. | | 3 | 1982 |
| 06.5.3. | <u>Situation with respect to the combined production of electric power and heat</u> | | |
| <u>Description:</u> To promote international co-operation in the field of combined production with respect to exchanges of information between member countries | | | |
| <u>Method of work:</u> Countries with experience in this field will, at the annual sessions, provide information on certain practical achievements so as to keep government experts informed of technological progress which may be made in the near future. | | cont. | |
| 06.5.4. | <u>Utilization of geothermal energy for electric power production and space heating</u> | | |
| <u>Description:</u> To review geothermal resources and the techniques used for the production of electricity and of heat of geothermal origin. | | | |
| <u>Method of work:</u> The Group of Experts on Electric Power Stations will consider a report to be prepared by government rapporteurs from Italy. A seminar might be organized on this subject after 1982, in co-operation with other interested subsidiary bodies of ECE. | | 3 | 1983 |

| | Estimated duration (in years) | Estimated termination year |
|---|-------------------------------------|----------------------------------|
| 06.5.5. <u>Impact of the introduction of summer time on the more economical use of electric power</u> | | |
| <u>Description:</u> The purpose of this project is to promote greater savings in the use of electric power through exchanges of data, information and experience. | | |
| <u>Method of work:</u> The Group of Experts on Problems of Planning and Operating Large Power Systems will consider a report prepared by government rapporteurs from Poland on the basis of information transmitted by Governments. | | |
| | 2 | 1980 |
| 06.5.6. <u>Methods used to evaluate and measure losses in electric power transmission and distribution systems and ways of reducing such losses</u> | | |
| <u>Description:</u> The purpose of this project is to determine the amount of losses in networks and to study economic means of reducing such losses. | | |
| <u>Method of work:</u> The Group of Experts on Problems of Planning and Operating Large Power Systems will consider a questionnaire and, at a later stage, a report to be prepared on the basis, <u>inter alia</u> , of the replies to this questionnaire; both texts will be prepared by government rapporteurs from the German Democratic Republic. | | |
| | 2 | 1980 |
| <u>WORK AREA 06.6: ENVIRONMENTAL PROBLEMS</u> | | |
| 06.6.1. <u>Selected problems concerning the relationship between electricity and the environment</u> | | |
| <u>Description:</u> To study the technical and economic aspects of environmental problems relating to the production, transmission and distribution of electric power and means of solving them. | | |
| <u>Method of work:</u> The various projects indicated below 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. | | |
| 06.6.1.1. Effects of thermal discharges from thermal power stations into watercourses and reservoirs, and regulations in force in various countries | | |
| <u>Method of work:</u> The Group of Experts on the Relationship between Electricity and the Environment will consider a report to be prepared by government rapporteurs from the USSR on the basis of information transmitted by ECE Governments. Contacts will be established with the Committee on Water Problems on this question. | | |
| | 3 | 1980 |

| <u>Estimated duration (in years)</u> | <u>Estimated termination year</u> |
|--|---|
|--|---|

06.6.1.2. Effects of polluted water on the cooling systems of thermal power stations

Method of work: The Group of Experts on the Relationship between Electricity and the Environment will study a report to be prepared by government rapporteurs from Poland on the basis of information transmitted by ECE Governments.

| | |
|---|------|
| 4 | 1981 |
|---|------|

06.6.1.3. International comparison of standards relating to methods of calculating pollution levels and measuring and monitoring pollution caused by electric power stations

Method of work: The Group of Experts on the Relationship between Electricity and the Environment will consider a report to be prepared by a group of national rapporteurs on the basis of information transmitted by ECE Governments. Initially, the Group will consider only air pollution.

Work is in progress

06.6.1.5. Environmental aspects of the cooling systems of closed-circuit thermal power stations

Method of work: The Group of Experts on the Relationship between Electricity and the Environment will consider a report to be prepared by government rapporteurs from the Federal Republic of Germany on the basis of information transmitted by ECE Governments.

| | |
|---|------|
| 3 | 1981 |
|---|------|

06.6.1.6. The economic and environmental aspects of electric space-heating systems

Method of work: The Group of Experts on the Relationship between Electricity and the Environment will carry out this study by preparing a report on electric heating. The Committee on Electric Power will examine the possibility of associating other ECE subsidiary bodies interested in undertaking comparable studies for other sources of energy in the preparation of a consolidated report.

| | |
|---|------|
| 3 | 1981 |
|---|------|

06.6.1.7. Liquid discharges from thermal power stations (excluding thermal discharges): chemical effluents and cooling-tower blowdown

Method of work: The Group of Experts on the Relationship between Electricity and the Environment will consider a report to be prepared by government rapporteurs from the Federal Republic of Germany on the basis of information transmitted by ECE Governments.

| | |
|---|------|
| 3 | 1981 |
|---|------|

| | Estimated duration (in years) | Estimated termination year |
|---|-------------------------------------|----------------------------------|
| 06.6.1.8. Noise emission by thermal power stations | | |
| Method of work: The Group of Experts on the Relationship between Electricity and the Environment will consider a report to be prepared by government rapporteurs from the United Kingdom on the basis of information transmitted by ECE Governments. | 3 | 1981 |
| 06.6.1.9. The possibilities of using residual heat in the cooling water of electric power stations | | |
| Method of work: The Group of Experts on the Relationship between Electricity and the Environment will consider a report to be prepared by government rapporteurs from France on the basis of information transmitted by ECE Governments. This report will be transmitted to the Group of Experts on Distribution and Rural Electrification with project 06.3.6.1. | 3 | 1981 |
| 06.6.1.10. Prospects of using non-polluting water-treatment techniques in thermal power stations; technical and economic effectiveness | | |
| Method of work: The Group of Experts on the Relationship between Electricity and the Environment will consider a report to be prepared by government rapporteurs from Spain on the basis of information transmitted by ECE Governments. | 3 | 1981 |
| 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 | | |
| Method of work: The Group of Experts on the Relationship between Electricity and the Environment will consider a report to be prepared by government rapporteurs from Belgium on the basis of information transmitted by ECE Governments. | 3 | 1981 |
| 06.6.2. <u>Integration of electricity production, transmission and distribution installations into the environment</u> | | |
| Description: The purpose of this 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>Estimated duration (in years)</u> | <u>Estimated termination year</u> |
|---|--|---|
| <p><u>Method of work:</u> The various projects indicated below will be implemented by the Group of Experts on the Relationship between Electricity and the Environment in co-operation, where necessary, with the Senior Advisers to ECE Governments on Environmental Problems.</p> | 3 | 1981 |
| 06.6.2.1. Visual impacts of electric power stations | | |
| <p><u>Method of work:</u> The Group of Experts on the Relationship between Electricity and the Environment will consider a public information booklet to be prepared by government rapporteurs from Czechoslovakia, Finland and the United Kingdom.</p> | 3 | 1980 |
| 06.6.2.2. Nuclear power and the environment | | |
| <p><u>Method of work:</u> The Group of Experts on the Relationship between Electricity and the Environment will consider a booklet to be prepared by government rapporteurs from France, Spain and the USSR, in co-operation with IAEA.</p> | 3 | 1981 |
| 06.6.2.3. Integration of electricity distribution installations into the environment | | |
| <p><u>Method of work:</u> The Group of Experts on the Relationship between Electricity and the Environment and the Group of Experts on Distribution and Rural Electrification will consider a report to be prepared by government rapporteurs from Finland on the basis of information communicated by various countries.</p> | 3 | 1981 |
| 06.6.2.4. The contribution of electric power and its development to improving the environment | | |
| <p><u>Method of work:</u> The government experts from Belgium, Poland and France will prepare a booklet for consideration by the Group of Experts on the Relationship between Electricity and the Environment.</p> | 3 | 1982 |
| 06.6.4. <u>Land use in electric power production and transmission systems - Past trends and future prospects</u> | | |
| <p><u>Description:</u> The purpose of this project is to determine the intensity of land use in electric power systems and its development.</p> | | |
| <p><u>Method of work:</u> The Group of Experts on Problems of Planning and Operating Large Power Stations and the Group of Experts on the Relationship between Electricity and the Environment will consider a report prepared by government rapporteurs from France.</p> | 4 | 1982 |

07. - GAS

| | |
|-------------------------------------|----------------------------------|
| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|

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 over-all 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 or 4 year intervals, symposia will be held on the subject. Factors which may play a major role in the future supply and demand of gas will be considered by the Group of Experts on Gas Statistics and Forecasting Problems at a meeting to be held from 8 to 9 January 1981. The Committee will consider, at its next session, the holding of a symposium in 1982.

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 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 for the ECE region. In their work, they will take into account the contributions of the Committee on Gas on the long-term prospects in the gas industry.

| | |
|---|------|
| 2 | 1980 |
|---|------|

| <u>Estimated duration (in years)</u> | <u>Estimated termination year</u> |
|--|---|
|--|---|

Method of work: The Committee will make available to the Senior Economic Advisers information on the long-term trends in the gas industry having an impact on economic development.

WORK AREA 07.2: CURRENT DEVELOPMENTS AND PROSPECTS,
INCLUDING TRADE

07.2.1. Analysis of the gas situation and prospects for
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 permit Governments to share experience in management of their gas industries. Due attention will also be paid to developments of LPG markets and related activities.

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 had on specific issues based on specialized papers prepared by government rapporteurs, with the help of the secretariat. The Committee is considering the convening of a "Symposium on the LPG Situation in the ECE region during 1980-1990" in Spain. This will be confirmed later.

cont.

07.2.2. Developments and prospects for intraregional
trade in gas

Description: The Committee, at its annual sessions, will consider problems relating to developments and prospects for intraregional 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.

| | |
|-------------------------------------|----------------------------------|
| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|

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:

- (a) 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. On the use of gas for electricity generation in thermal power plants, the Group will consider a preliminary consolidated paper by Mr. Levy (France) and Mr. Merta (Czechoslovakia), government rapporteurs, based on replies received to a questionnaire on the subject.

4

1980

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

Description: The Committee will examine economic and technical problem, in 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.

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, prepared by Mr. Dechamps (EEC). At its next session it will also consider the paper prepared by the Netherlands, entitled "Hazard assessment of LNG supply and storage". The Group will discuss in depth the report of the Seminar and Study Tour held in Washington DC (USA) in March 1979 on LNG peak-shaving. It will then decide on which subjects attention should be focused in future work (for instance analysis of factors influencing decision-making in selecting the most effective mix of peak coverage methods; specific safety aspects in the exploitation of LNG installations; repair of cryogenic materials and equipment, etc.)

4

1982

| | |
|-------------------------------------|----------------------------------|
| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|

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 as at 31 December 1978 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 three 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.

3

1981

07.3.4. Problems in management of international gas pipelines

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

Method of work: On the basis of a questionnaire prepared by the USSR delegation, new information will be collected by the secretariat for consideration of the Group at its next session. The Government of Czechoslovakia will designate a rapporteur who will summarize the information and prepare a draft report for the next session of the Group.

3

1981

07.3.5. Development of underground gas storage facilities

Description: The Committee will study various aspects of underground storage of gas and related problems.

Method of work: The Group of Experts on the Transport and Storage of Gas will continue work on the topic. The rapporteur from France, in collaboration with a group of specialists, will define three or four new problems which might be studied by the Group in its future work. At its next session, the Group will discuss the paper prepared by the Government of the Federal Republic of Germany, together with other information available.

2

1980

| | |
|-------------------------------------|----------------------------------|
| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|

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 the above and exchange information and experience on maintenance practices and new techniques. Some specific problems will be selected for detailed study.

Method of work: The Group of Experts on the Transport and Storage of Gas approved the designation of Mr. Holschumacher, from the Federal Republic of Germany as rapporteur and requested him to prepare a questionnaire on the internal lining of pipelines, especially those crossing areas with a high chemical activity of soil for the consideration of the Group at its next session. At its next session the Group will also discuss the papers prepared by the German Democratic Republic and the USSR, and perhaps define new topics of study. 3 1981

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 Committee studies "Economic and technical prerequisites in the determining of the load factor of gas transport pipelines".

Method of work: The secretariat will invite Governments to comment on the report prepared by the USSR on the problem, at its next session. The Group will decide whether to give it general release. The work on this topic could then be discontinued.

2 1980 /

| <u>Estimated duration (in years)</u> | <u>Estimated termination year</u> |
|--|---|
|--|---|

07.3.9. Select 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 contacted Governments for their comments on GAS/AC.4/3, the provisional agenda of the Second Meeting of Directors of Research Institutes or Centres of the Gas Industry. Further comments received will be considered by the Committee at its next session.

2

1980

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) problems in distribution and uses regarding the addition of hydrogen containing gas to natural gas; and, (b) problems of ensuring the compatibility of natural gases of different characteristics and from different sources.

Method of work: At its next session, the Group of Experts will consider government contributions received on project component (a). As regards project component (b), at its next session the Group will consider information received from Governments on their interchangeability problems faced or foreseen.

3

1980

07.3.9.2. Research problems in the field of transport and storage of gas

Description: 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 it considers the economic aspects of the transportation of cooled gas of a temperature of -50°C to -70°C by pipeline.

Method of work: On the basis of a questionnaire prepared by the USSR, the secretariat will collect information for consideration by the Group of Experts on the Transport and Storage of Gas at its next session.

3

1980

| <u>Estimated duration (in years)</u> | <u>Estimated termination year</u> |
|--|---|
|--|---|

07.3.9.3. Offshore technology and sea pipelines for the transport of gas

Description: 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.

Method of work: The Group decided to strengthen co-operation in this field and approved, in principle, the draft programme of work on the problem of offshore technology and sea pipelines, prepared by the USSR. At its next session, it will decide on the topic to be initiated in 1980. It will also discuss the document entitled "Guidelines for submarine pipelines for the transport of gas", prepared by the Netherlands, and any new information received. The possibility of working out common guidelines (standards) by the Committee on Gas on the construction of sea pipelines will be explored. A "seminar on offshore natural gas technology - production and processing, transport and reception" might be held in two years. The secretariat will contact Governments and report to the next session of the Committee on their interest in such a symposium.

| | |
|---|------|
| 4 | 1982 |
|---|------|

07.3.9.4. Geological and geophysical methods of prospecting for gas

Description: The Committee will review methods of exploration for natural gas with a view to exchanging information and experience between member countries.

Method of work: A Seminar on Exploration for Gas Fields in the ECE Region (Geology and Geophysics) will be held in Hanover, Federal Republic of Germany from 6 to 10 April 1981.

| | |
|---|------|
| 3 | 1981 |
|---|------|

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: The Group of Experts on the Use and Distribution of Gas will examine COAL/SEM.6/?, containing the report of the Symposium on the Gasification and Liquefaction of Coal, organized by the

| | |
|-------------------------------------|----------------------------------|
| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|

Coal Committee at Katowice (Poland) in April 1979, formulate suggestions for associating the Committee on Gas with the work of the Coal Committee in its coal gasification work and consider methods of work on the tasks recommended by the Symposium to be carried out by the Committee on Gas.

| | |
|---|------|
| 5 | 1981 |
|---|------|

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

Description: The Committee will study the economic and technical aspects of the transportation of huge amounts of gas by pipelines of large diameter for very long distances.

Method of work: At its next session, the Group of Experts on the Transport and Storage of Gas will consider the revised questionnaire, prepared by the USSR, taking into account suggestions made or to be made by other Governments, e.g. the United Kingdom. The Group will decide later concerning the Method of work. The Group will consider any further information received on the topic and will approve the designation of a rapporteur.

| | |
|---|------|
| 2 | 1980 |
|---|------|

07.3.12. Exploration and exploitation of natural gas resources

Description: The Committee will select problems for detailed study regarding the exploration and exploitation of natural gas resources. At present, the Group of Experts on Natural Gas Resources is considering:
(a) collection and publication of statistical data on the gas recovery factor; (b) collection and examination of statistical data on natural gas reserves; (c) collection of statistical information on natural gas reserves in non-ECE countries; (d) preparation of a draft classification of wells.

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 from the USSR will summarize the information received in reply to the questionnaire contained in GAS/GE.4/R.3 and addendum. The Group, at its next session, will also discuss the USSR paper entitled "Statistical assessment of the ultimate gas recovery factor".

| | |
|---|------|
| 2 | 1980 |
|---|------|

| <u>Estimated duration (in years)</u> | <u>Estimated termination year</u> |
|--|---|
|--|---|

The Group will collect (b) statistical data on estimates of natural gas reserves in ECE countries up to 31 December 1978 and consider them at its annual session; (c) data on reserves in non-ECE countries that might be received will also be considered by the Group.

cont.

The Group of Experts, at its next session, will consider the initiation of the study on "Exploration for natural gas in offshore areas" and decide on the method of work.

| | |
|---|------|
| 2 | 1980 |
|---|------|

(d) Mr. K. Schmatz, from Austria, will prepare for the next session of the Group, a draft classification of wells.

| | |
|---|------|
| 2 | 1980 |
|---|------|

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 will be held in 1980 at Dortmund (Federal Republic of Germany) where experts will consider further work to be done in the field of gas industry and environment. The Informal Meeting will also consider the possibility of a symposium on the subject in the future.

| | |
|---|------|
| 3 | 1982 |
|---|------|

WORK AREA 07.5: EFFICIENCY AND CONSERVATION

07.5.1. Studying the efficiency and effectiveness of the use of gas in various branches of industry (or of the economy)

Description: The Committee will study and exchange information and experience regarding the efficiency and effectiveness problems in various uses of gas. In connexion with project components: (a) the Group of Experts collects the addresses and information about governmental and other organizations serving as information centres for advising clients on energy saving/rational use, and regarding other project components it studies; (b) 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

| <u>Estimated duration (in years)</u> | <u>Estimated termination year</u> |
|--|---|
|--|---|

industry; (c) influence of cost of gas supply on the rational use of gas in the various sectors of the economy; (d) recuperation of heat in combustion products of industrial installations using natural gas including recuperative burners; (e) establishment of a priority list for natural gas consumption in various sectors of the economy so as to obtain maximum yield; (f) impact of the use of natural gas on the reduction of specific energy consumption in different sectors of the economy; (g) efficiency of gas-utilizing appliances; (h) situation regarding the use of heat pumps running on gas; (i) measures of gas conservation and study of the results.

Method of work: As regards project component (a), the Group of Experts, at its next session, will continue work in this field and will issue a list of the addresses of governmental and other organizations serving as information centres for advising clients on energy saving/rational uses, to enable these organizations to contact each other and exchange information in their fields of activity. Regarding project component (b), it will consider a consolidated report drafted by Mr. N. Federov, government rapporteur from the USSR, based on information provided by Governments on their energy saving and rational use campaigns, with a view to giving it general release.

| | |
|---|------|
| 4 | 1980 |
|---|------|

Concerning project component (c), in case there are further questions arising under this topic, Mr. J. Balder, government rapporteur from the Netherlands will deal with them, and questions raised will be considered by the Group of Experts.

| | |
|---|------|
| 1 | 1980 |
|---|------|

As regards project component (d), 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 Mr. N. Modrogan, the government rapporteur from Romania, based on replies to the questionnaire circulated on the subject.

| | |
|---|------|
| 4 | 1980 |
|---|------|

Regarding project component (e), the Group of Experts will consider a preliminary consolidated paper, prepared by Mr. J. Konig, rapporteur from the Federal Republic of Germany, based on information received from Hungary, Belgium, France, Netherlands, United States, Czechoslovakia and Federal Republic of Germany.

| | |
|---|------|
| 2 | 1981 |
|---|------|

| | Estimated duration (in years) | Estimated termination year |
|--|-------------------------------------|----------------------------------|
| Regarding project component (f), replies to the questionnaire on "Impact of the use of natural gas on the reduction of specific energy consumption in different sectors of the economy" will be considered by the Group of Experts. | 2 | 1981 |
| Regarding project component (g), Mr. J. Bakker, government rapporteur from the Netherlands, will prepare a paper to initiate the study, which will be considered by the Group. | 2 | 1981 |
| Regarding project component (h), the secretariat will carry out an enquiry on gas-run heat pumps, by contacting delegations or organizations likely to contribute. The outcome of the enquiry will be considered by the Group of Experts on the Use and Distribution of Gas. | 2 | 1981 |
| Regarding project component (i), in connexion with "October 1979", the special month for action on energy conservation, countries are asked to report on (i) special efforts made for the conservation of gas; and (ii) results of those efforts, if possible the reduction in energy consumption. The secretariat will request written communications from Governments in this connexion. | | |
| 07.5.2. <u>Exploitation of natural gas, stimulation and enhanced recovery techniques</u> | | |
| <u>Description:</u> 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. | | |
| <u>Method of work:</u> The Group of Experts on Natural Gas resources 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 USSR government rapporteur. At its fifth session, the Group will also consider the revised paper prepared by the USSR government rapporteur entitled "Development of gas fields in carbonate rocks, estimation of reserves, methods of increasing the recovery factor". | | |
| | 2 | 1980 |
| | 2 | 1980 |

| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

WORK AREA 07.6: STATISTICS AND INFORMATION

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 "Over-all 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.

| <u>Estimated duration (in years)</u> | <u>Estimated termination year</u> |
|--|---|
|--|---|

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). The Group of Experts, at its next session, will also consider, under project component 07.6.2.(d), the possibility of collecting separate data for butane and propane, in addition to LPG. This data could also be collected in tonnes.

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 identifying 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 1979 investments data. Mr. Glaser (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 1980, which will be issued for consideration by the Committee at its twenty-seventh session.

cont.

08. - HOUSING, BUILDING AND PLANNING

| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

WORK AREA 08.1: 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. The session will be followed by a study tour in one of the member countries. These discussions and study tours will 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 country monographs prepared on the basis of an agreed outline and circulated directly among Governments in advance of the session. The study tours will last for one week and are to be organized in accordance with guidelines adopted by the Committee.

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: The project is being carried out by the Group of Experts on Urban and Regional Research in accordance with guidelines agreed by the Committee. The study will draw on the results of several studies and seminar reports relating to long-term perspectives and forecasting in the field of human settlements and on relevant statistics and research. Informal consultations will be held with experts from interested countries. A seminar may be organized.

| <u>Estimated duration (in years)</u> | <u>Estimated termination year</u> |
|--|---|
|--|---|

08.1.3. Survey of the human settlements situation in the ECE region

Description: The Committee will regularly review and assess the state of the human settlements situation in the ECE region. The purpose of this project is to take stock of past achievements and to provide a basis for the discussion of current and long-term trends and policies in the ECE region. The results of the review will constitute a regional input to the global survey of the human settlements situation, to be undertaken in accordance with decisions taken by the Commission on Human Settlements.

Method of work: The human settlements situation will be described in quantitative and qualitative terms, as appropriate, and commented upon in country monographs, to be prepared every five years on the basis of an agreed outline. The monographs will be analysed and synthesized by the secretariat in the form of a report for publication. Co-operation will be maintained with the United Nations Centre for Human Settlements in the implementation of this project.

cont.

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 settlements and related purposes. The Committee will further participate in studies on land-use problems undertaken in a comprehensive and multisectoral manner, in accordance with Commission resolution 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 has been prepared by a general rapporteur for publication in 1980. Further work on this project will be discussed by the Committee in September 1980.

cont.

| <u>Estimated duration (in years)</u> | <u>Estimated termination year</u> |
|--|---|
|--|---|

08.1.5. 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 human settlements.

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. The secretariat will continue to collect statistical information and to publish the Annual Bulletin of Housing and Building Statistics for Europe.

cont.

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 the cost and availability of different forms of energy.

Method of work: Following a secretariat study and a seminar, in-depth discussions on energy and human settlements will be held at the Committee's annual sessions. Further work also includes the convening of intersecretariat meetings and national colloquia and monitoring of energy-related projects carried out by the Committee's subsidiary bodies in preparation for a second seminar to be held in a few years' time.

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 |
|-------------------------------------|----------------------------------|

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.

| | |
|---|------|
| 2 | 1980 |
|---|------|

08.1.8. Special human settlement 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, the Group will discuss how to surmount the problem of squatter settlements and substandard housing in towns: quantitative, qualitative and legal aspects.

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. Rapporteurs will prepare a basic paper for in-depth discussion. In addition, national monographs and case studies exemplifying problems and policies of particular concern to the countries of southern Europe will be prepared and exchanged at each meeting. The Group covers the entire field of human settlements and reports directly to the Committee.

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 development 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 1980, taking into account the outcome of the Seminar on International Aspects of Research and Development in the Arctic, to be organized by the Senior Advisers to ECE Governments on Science and Technology.

| | |
|---|------|
| 2 | 1980 |
|---|------|

| | |
|-------------------------------------|----------------------------------|
| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|

08.1.10. Citizen participation in the planning, implementation and management of human settlements

Description: The Committee will examine methods and means of strengthening citizen participation in the planning, construction, improvement and management of human settlements. This project will assist 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 Yugoslavia in October 1980. The documentation for the seminar will comprise a background paper, prepared by a general rapporteur in co-operation with the secretariat, response papers by Governments and international organizations and introductory reports by rapporteurs. A preparatory consultation for the seminar will be held in April 1980.

2

1980

WORK AREA 08.2: URBAN AND REGIONAL PLANNING

08.2.2. Promotion of international co-operation in the field of urban and regional research

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 carried out by the Group of Experts on Urban and Regional Research which reports to the Committee through the Working Party on Urban and Regional Planning. The Group has two main tasks: (i) to exchange research results and experience on subjects relevant to the activities of the Committee and 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 include, inter alia, the organization every four years 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.

| | |
|-------------------------------------|----------------------------------|
| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|

08.2.3. Urban renewal and the quality of life

Description: The Working Party on Urban and Regional Planning 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 third symposium in May 1978, a fourth symposium was held in May 1979; both symposia were held in conjunction with study tours. Also, an in-depth discussion was held at the Working Party's eleventh session in May 1979. A publication is being prepared on the basis of the documentation and debates on this topic.

2

1980

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

Description: The Working Party on Urban and Regional Planning 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 two seminars, held in 1973 and 1976, respectively, the project will take the form of an exchange of analytical 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. Co-operation will be maintained with the Inland Transport Committee.

6

1984

08.2.7. Integrated physical, socio-economic and environmental planning

Description: The Working Party on Urban and Regional Planning will continue to study and develop a methodology of integrated physical, socio-economic and environmental planning of human settlements. This project is expected to be of direct assistance to Governments and public authorities in physical planning on the national, regional and local levels. The project will take up the discussions on integrated planning where they were left by the United Nations Conference on Human Settlements (HABITAT); thus the project is in a sense the essence of all the discussions of the Working Party.

| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

Method of work: A thorough analysis of the problem has been undertaken by rapporteurs in discussions in expert meetings and in in-depth discussions during regular sessions of the Working Party. The project culminated in a seminar, convened in 1979 in co-operation with the Senior Advisers to ECE Governments on Environmental Problems (see project 05.1.1.1). Follow-up to the seminar will be discussed at an informal consultation and, subsequently, by the Working Party.

2

1980

WORK AREA 08.3: HOUSING POLICIES

08.3.1. Review of current 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 problems in the field of housing, building and planning (project 08.1.1), 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 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 experience gained by Governments with regard to related policies and measures, taking into account newly-arising social and economic conditions.

Method of work: After a review of four pilot studies prepared by government rapporteurs, Governments will indicate in which issues they have a special interest. This information will be consolidated by a government rapporteur and serve as a basis for the definition of further work.

4

1982

| | Estimated duration (in years) | Estimated termination year |
|--|-------------------------------------|----------------------------------|
| 08.3.4. <u>Housing management problems</u> | | |
| <p><u>Description:</u> 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.</p> | | |
| <p><u>Method of work:</u> The possible scope and content of work have been discussed on the basis of exploratory papers by two rapporteurs. On the basis of further information to be collected from Governments, the project will be defined at an informal consultation. An <u>ad hoc</u> meeting or a seminar will be convened.</p> | | |
| | 4 | 1982 |
| 08.3.5. <u>Housing forecasting and programming</u> | | |
| <p><u>Description:</u> The Working Party on Housing will continue to exchange periodically information and experience on 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.</p> | | |
| <p><u>Method of work:</u> Countries have prepared national monographs which have been analysed by a consultant. The analysis has also included proposed themes for a seminar, the complete programme of which will be discussed at an informal consultation. A seminar will be held in Spain in Spring 1981.</p> | | |
| | cont. | |
| 08.3.6. <u>Major long-term trends in housing policies</u> | | |
| <p><u>Description:</u> 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.</p> | | |

| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

Method of work: The project is being implemented both through 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; the seminar material, debates and results have been taken into account; these have been elaborated in stages by rapporteurs in consultation with the secretariat. The seminar was held in Finland in 1977. The study will be published in printed form in late 1979.

1

1979

08.3.7. Relationship between housing and the national economy

Description: The Working Party on Housing will explore, both from the 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, investments and employment, 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.

Method of work: Following exploratory work, the formulation of the proposals for a project was made at an ad hoc meeting. Rapporteurs from six countries are preparing discussion papers for consideration by the Working Party in May 1980. An ad hoc meeting or a seminar may be convened.

4

1982

WORK AREA 08.4: BUILDING

08.4.2. Environmental problems arising from construction activities

Description: The Working Party on Building 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 as well as of construction activities.

Estimated
duration
(in years)

Estimated
termination
year

Method of work: Following an in-depth discussion and a seminar on the more general aspects of the subject, further work is currently concentrated on problems and policies relating to the working environment in the construction industry. A colloquium was held in Stockholm in March 1979. Rapporteurs are preparing proposals for further work to be considered by the Working Party in June 1980.

3

1981

08.4.3. Mechanization in the building industry

Description: The Working Party on Building will study mechanization problems in a broad sense, including possibilities of 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: An enquiry on mechanization problems in the building industry has been undertaken and a rapporteur has synthesized the material received. A seminar, held in Warsaw in May 1979, is being followed-up by specialized inquiries.

2

1980

08.4.7. Energy conservation in buildings

Description: The Working Party on Building 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: Rapporteurs will undertake in-depth studies of certain aspects of the project. Informal consultations and ad hoc meetings will be held. The Working Party will hold in-depth discussions on the project at its annual sessions, as appropriate.

3

1981

Estimated
duration
(in years)

Estimated
termination
year

08.4.8. Information aimed at assisting international
trade in building products and know-how

Description: The Working Party on Building will publish reports 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.

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 terminology sources will be prepared by the secretariat.

cont.

08.4.9. International harmonization of the
technical content of building regulations

Description: The Working Party on Building 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.

Method of work: Intergovernmental and inter-secretariat meetings will be organized by 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.

| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

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

Description: Differences in national approaches to quality approval and control of building products give rise to major obstacles in international trade. The Working Party on Building will promote the harmonization of quality approval and control and systems operating in respect of building regulations.

Method of work: The project was initiated by rapporteurs in co-operation with the secretariat. Subsequent work was carried out by the secretariat in co-operation with EEC, IEC, ISO, NKB and subregional organizations concerned with certification and new-product assessment. Close links are established with ECE/STAND concerning its certification studies. Ad hoc meetings are being convened, as appropriate.

cont.

08.4.11. International harmonization of standards
for building

Description: As a development of its building regulations harmonization work, the Working Party on Building agreed in December 1976 to intensify its efforts to promote international standardization in the building field starting with a review of programmes and priorities established by ISO and other international organizations concerned.

Method of work: CMEA, CEN, IEC, INSTA, ISO, CIB and other international standardization and pre-standardization bodies contribute information in support of the work. A list of international building standards projects has been prepared by the secretariat and will be kept up to date by ISO. Priorities from the governmental point of view are notified to the appropriate agencies. Close co-ordination is maintained with the work of ECE/STAND.

cont.

| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

08.4.12. Role and contribution of the construction
sector in economic development

Description: The Working Party on Building will study the contribution of the construction sector to Gross Domestic Product (or Net Material Product) and to employment (directly and indirectly). The study will also include an examination of the use of materials and other resources, e.g. energy, for the construction, improvement and maintenance of buildings and public works. The study, which aims at demonstrating the important role of construction activities in economic development, is expected to be of assistance to Governments in their policy-making, both in developed and developing countries.

Method of work: The work on the study will be initiated by the secretariat. Further decisions on the method of implementing the study will be taken by the Working Party on Building at its June 1980 session. Close co-operation will be maintained with the United Nations Centre for Human Settlements (UNCHS).

3

1981

09. - INLAND TRANSPORT

| | |
|-------------------------------------|----------------------------------|
| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|

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 including combined transport. | cont. |
| (e) The prospects for rail transport, in particular with regard to the development of high capacity rapid transport systems of the main international railway lines as well as the prospects of 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 |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

In the framework of this project, the following subjects will inter alia be studied:

- | | | |
|--|-------|------|
| (i) Consideration of possible action in respect of the document on "Problems connected with the use by international road transport, of the transport infrastructure in Europe". | 2 | 1981 |
| (ii) Consolidated Resolution on Road Transport Facilitation. | 2 | 1981 |
| (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. With regard more particularly to combined transport mentioned under the same item (c), the Working Party on Rail Transport will examine together with the Group of Experts on Combined Transport and the Working Party on Road Transport the implications resulting for railways from the technique of piggy-back transport and especially those which concern the standardization of specialized rolling stock as well as operational conditions of combined transport. The document and the Consolidated Resolution mentioned under (f) will be considered within the framework of the Working Party on Road Transport, which will select certain particular aspects and formulate proposals for appropriate action.

| | Estimated duration (in years) | Estimated termination year |
|---|-------------------------------------|----------------------------------|
| 09.1.2. <u>Co-operation with the Senior Economic Advisers to ECE Governments on long-term Economic prospects for the ECE region</u> | | |

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.

cont.

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.

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; | 3 | 1982 |
| (b) study in depth certain aspects of prospects for the development of inland water transport in Europe to be selected by the Committee; | 3 | 1982 |
| (c) study and review of progress with regard to the study of the Danube-Oder-(Elbe) connexion; | 2 | 1981 |
| (d) study and review of progress with regard to the first phase of the study of the Danube-Ilorava-Vardar/Axios-Aegean Sea connexion. | 1 | 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.

| <u>Estimated duration (in years)</u> | <u>Estimated termination year</u> |
|--|---|
|--|---|

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 and the preparation of a possible seminar; | 2 | 1981 |
| (f) methods and technical means for freeing the fairway from ice in order to ensure uninterrupted navigation on rivers, lakes and channels during the period when they are frozen. | cont. | |

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.

| <u>Estimated duration (in years)</u> | <u>Estimated termination year</u> |
|--|---|
|--|---|

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.

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.

cont.

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.

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.

5

1982

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

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

*/ United Nations Development Programme.

| <u>Estimated duration (in years)</u> | <u>Estimated termination year</u> |
|--|---|
|--|---|

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
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.

5

1984

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.

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 will consider the question of the
preparation of a draft international agreement relative
to the introduction of automatic coupling.

cont.

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

09.2.7. Development of rail transport

Description:

(a) 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.

3

1982

(b) Identification of bottlenecks on the European
railway network in the light of existing studies
and the study of ways and means which might be
sought to eliminate them.

3

1982

(c) Study of the possibilities of harmonization of
the application and periods of summer time and
the traditional changeover dates of the
railway schedules.

3

1982

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

**/ Economic Commission for Western Asia (ECWA)

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

| | |
|-------------------------------------|----------------------------------|
| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|

Method of work: The work on (a) will be carried out by the Working Party on Rail Transport and in co-operation with the secretariats of ECWA and ESCAP. With regard to project components (b) and (c), the Working Party on Rail Transport will implement these project components.

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 dangerous goods in the region, as set out in international agreements and recommendations, and will decide 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 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 Inland Transport Committee resolution No. 223 relating to the European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway (ADN); | cont. |
| (c) Handling of administrative and technical questions arising from the implementation of 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. | 3 |

| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

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.

09.3.2. Selected problems of simplification and harmonization of administrative formalities and procedure 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 the compatibility of systems of reserving seats among European railways. | 2 | 1981 |
| (c) Study of Customs questions with a view to simplification of Customs formalities and documents in the field of transport. | cont. | |
| (d) 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 | 1981 |
| (e) 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. | cont. | |

| | |
|-------------------------------------|----------------------------------|
| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|

Method of work: With regard to project components (a) and (b) the Working Party on Rail Transport implements these project components. With regard to project components (c) and (d), 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 (c) is implementing these project components, while the Inland Transport Committee and its subsidiary bodies concerned, as required, implement project component (e).

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/

cont.

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.

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 (CMNI)).

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.

| | |
|-------------------------------------|----------------------------------|
| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|

- 09.3.4. Promotion of combined transport and study of requirements for combined transport equipment and its terminals and their utilization; co-operation with UNCTAD in the preparation of the draft convention on international multimodal transport, and in its work on the preparation of container standards; study of other aspects of combined transport

Description:

- (a) The Committee will select administrative, technical, economic, documentary 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 and terminals, 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.

cont.

- (b) The Committee co-operates with UNCTAD with regard to the draft convention on international multimodal transport dealing inter alia with the liability and documentary régime of such transport, its work on container standards for international multimodal transport and other aspects of multimodal transport.

2

1980

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.

| <u>Estimated duration (in years)</u> | <u>Estimated termination year</u> |
|--|---|
|--|---|

- 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 ships' certificates

Description: The Committee will continue or undertake work on:

- | | | |
|--|---|------|
| (a) Improvement of the uniform technical requirements for commercial craft. | 1 | 1980 |
| (b) The application of these technical requirements to vessels in service. | 3 | 1982 |
| (c) Standardization of additional technical requirements for pushed barges and their equipment. | 2 | 1981 |
| (d) Criteria for the definition of the maximum number of persons on board pleasure craft. | 2 | 1981 |
| (e) Standardization of and reciprocal recognition of certain ships' papers with a view to elaborating or updating resolutions on these subjects. | 2 | 1981 |
| (f) Harmonization of the standards to be applied to techniques for the prevention of water pollution by inland navigation vessels. | 4 | 1983 |

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. The project components (a) and (b) shall be taken up periodically or in case of necessity.

| | |
|-------------------------------------|----------------------------------|
| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|

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 studies carried out on the subject by other international organizations.
- (d) 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.

cont.

1

1980

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 and the Group of Experts on Combined Transport with a view to possible modification of the ATP and the resolution.

| | |
|-------------------------------------|----------------------------------|
| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|

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 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:

- | | | |
|--|-------|------|
| (a) Development of the 1958 Agreement and its annexes. | cont. | |
| (b) Review and development of the recommendations adopted in this field. | cont. | |
| (c) Completion of a set of technical provisions for "type approval" of the vehicle as a whole. | 3 | 1982 |
| (d) Harmonization of test procedures and other requirements for certification or approval of motor vehicles and their equipment. | 6 | 1985 |

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 (d), 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 in the course of its current activities, 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; transport facilitation, possibilities for exchanges of experts and information on the maintenance, operation and repair of transport equipment; practical measures to improve fuel consumption of road vehicles, road safety and the development of the modern transport technology best suited to such countries.

cont.

*/ These aspects are considered also under the items 09.4.4; 09.5.2 and 09.5.3.

| | |
|-------------------------------------|----------------------------------|
| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|

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.

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 introductions of new transport techniques and equipment

Description: The Committee will study problems arising in the 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.

cont.

Method of work: Consideration by the Joint Meetings of the RID Safety Committee and the Group of Experts on the Transport of Dangerous Goods.

- 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.

cont.

3

1982

| <u>Estimated duration (in years)</u> | <u>Estimated termination year</u> |
|--|---|
|--|---|

- (c) Application of Resolutions No. 13 and No. 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.
- (e) Study of the problem of the unification of the rules concerning civil liability and compulsory insurance of owners and users of pleasure craft.
- (f) Study of possible codification of existing safety provisions concerning inland navigation.

cont.

| | |
|---|------|
| 2 | 1981 |
| 4 | 1983 |
| 5 | 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).

cont.

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.

*/ Inter-Governmental Maritime Consultative Organization.

| <u>Estimated duration (in years)</u> | <u>Estimated termination year</u> |
|--|---|
|--|---|

- 09.4.4. Safety requirements for road transport, including safety standards for vehicle construction, inspection and maintenance; */ road traffic rules, road signs, signals and markings, and methods of training 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, inspection and maintenance.

cont.

Method of work: This work will be carried out by the Working Party on Road Transport and its subsidiary bodies.

- 09.4.5. Safety in rail transport

Description: The Committee will review progress in the development of railway safety.

cont.

Method of work: The work will be carried out by the Working Party on Rail Transport.

- 09.4.6. 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.

cont.

Method of work: Consideration of draft proposals by the Inland Transport Committee.

- 09.4.7. Safety regulations for transport of petroleum products by pipeline

Description: The Committee will exchange information on safety regulations in this field.

cont.

Method of work: Circulation of documentation, where appropriate, for consideration by the Inland Transport Committee.

*/ These aspects are also considered under items 09.3.8, 09.5.2. and 09.5.3.

| | |
|-------------------------------------|----------------------------------|
| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|

09.4.3. 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.

4

1983

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.

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.

cont.

Method of work: The Group of Experts on the Transport of Dangerous Goods will elaborate recommendations on measures to be taken to prevent accidental 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.

09.5.2. Reduction of pollution and noise in transport

Description: The Committee will study relevant questions */ regarding the progressive reduction of existing admissible limits concerning noise and emission of pollutants by vehicles, including their maintenance necessary to comply with those limits **/ and the pollution which might be caused during the transport of dangerous goods. It will also study various aspects relating to noise resulting from railway operations.

cont.

*/ For specific problems at present under consideration see TRANS/SC1/WP29/R.187.

**/ These aspects are considered also under items 09.3.3; 09.4.7. and 09.5.3.

| <u>Estimated duration (in years)</u> | <u>Estimated termination year</u> |
|--|---|
|--|---|

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 accidental pollution during the transport of dangerous goods, by the Group of Experts on the Transport of Dangerous Goods. The questions relating to noise caused by railway operations will be studied by the Working Party on Rail Transport.

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:

- | | | |
|---|---|------|
| (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. | 4 | 1983 |
| (c) Study of technical problems related to possible economy of fuel by vehicles including their use and maintenance. | 5 | 1984 |
| (d) Study of the implications of the use of alternative sources of power. | 5 | 1984 |

cont.

Method of work: With regard to project component (a), the work will be carried out by the Inland Transport Committee and its subsidiary bodies. The work on project component (b) will be carried out by the Working Party on Rail Transport. With regard to project components (a), (c) and (d), studies undertaken by the Group of Experts on the Construction of Vehicles will be reviewed.

WORK AREA 09.6: STATISTICS AND INFORMATION

09.6.1. Statistical bulletins 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.

cont.

| | |
|-------------------------------------|----------------------------------|
| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|

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 on Combined Transport, and arrange for their publication in the appropriate bulletins.

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.
- (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; development of a classification of characteristics of handling cargo in relation to the CSTE.
- (c) Study of specific aspects of the methodology employed in collecting statistics on international and national inland transport, container transport and port traffic; review of data collection work in international trade documents and procedures being undertaken in other international organizations and related to transport statistics.
- (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.

4

1983

cont.

cont.

| | Estimated duration (in years) | Estimated termination year |
|--|-------------------------------------|----------------------------------|
| (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. | |
| (g) Consideration of guidelines for a system of price and quantity statistics and its implementation in the transport field. | cont. | |
| (h) Development of uniform guidelines for the collection and publication of container transport statistics. | cont. | |

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 component (g), 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 (h).

09.6.3. Road traffic censuses

Description: The Committee will draw up recommendations for taking road traffic censuses at regular intervals.

cont.

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.

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.

cont.

Method of work: Preparation and publication by the secretariat, on the basis of information provided by Governments and River Commissions.

| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

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.

cont.

Method of work: The relevant documentation will be prepared by the secretariat on the basis of information provided by Governments.

10. - SCIENCE AND TECHNOLOGY

| | |
|-------------------------------------|----------------------------------|
| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|

WORK AREA 10.1: MEDIUM- AND LONG-TERM PERSPECTIVES

- 10.1.1. Co-operation with the Senior Economic Advisers to ECE Governments on long-term economic perspectives for the ECE region and the interrelationships between economic and technological developments

cont.

Description: With a view to providing information to national authorities and decision-makers on major scientific and technological trends and their implications for government decision-making, the Senior Advisers on Science and Technology, bearing in mind Commission decision G (XXXII), will identify and examine economic sectors in which major technological change is likely to be required or to occur; to this end they will also examine the relationships between technological progress and economic activity, as well as between technological development and its economic, social and environmental consequences.

Method of work: The Senior Advisers on Science and Technology will co-operate with the Senior Economic Advisers in assessing the impact of science and technology on long-term economic perspectives up to 1990. The Senior Advisers on Science and Technology will review progress on this project at their ninth session.

- 10.1.2. Scientific and technological trends in selected economic sectors

cont.

Description: With a view to providing information to assist national policy-makers and providing guidance in stimulating new co-operative projects among ECE member countries, reviews will be undertaken of major medium- and long-term scientific and technological trends in selected economic sectors, such as basic materials, energy, automation, electronics as well as technical progress in management and integrated information systems for management.

| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

Method of work: The secretariat will undertake a study of the interrelationships between socio-economic development and technological innovation as outlined in paragraph 24 of document SC.TECH./R.81, taking into account the views expressed by the Senior Advisers at their eighth session. The Senior Advisers will review progress on this project at their ninth session.

WORK AREA 10.2: 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

cont.

Description: With a view to providing information to national authorities and those involved in science and technology policy formulation, reviews will be undertaken of the major developments and changes in national science and technology policies, priorities and institutions including arrangements for the orientation, administration and evaluation of policies.

Method of work: (i) ECE member Governments will be requested to inform the secretariat on an on-going basis about any changes in their national science and technology policies, priorities and institutions; (ii) for every fourth session of the Senior Advisers, the secretariat will undertake a review of changes in over-all national science and technology policies (the next review will be prepared for the twelfth session). Between reviews, the secretariat will prepare a study on national science and technology policies in a narrower field (for the tenth session, a study on national policies in the field of technological innovation will be prepared); and (iii) preparations will proceed for the Seminar on the Evaluation of R and D in accordance with the decisions taken by the Senior Advisers at their eighth session.

| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

10.2.2. Review of international bilateral and
multilateral scientific and technological
co-operation

cont.

Description: Periodic reviews will be prepared of international scientific and technological co-operation agreements with a view to ensuring maintenance of a current register of bilateral and multilateral agreements.

Method of work: (i) The secretariat will issue a revised and up-to-date Annex I of document SC.TECH./R.86 reflecting all additional information; (ii) ECE member Governments will be requested to keep the secretariat informed about the status of bilateral agreements on scientific and technological co-operation, and to send it copies of all newly-concluded agreements as well as amendments to those already in force; and (iii) the secretariat will update the review of bilateral agreements and report periodically to the Senior Advisers.

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

pending

Description: Reports of the research plans and needs in sectors proposed by member countries will be prepared with a view to identifying new areas in which international co-operation in scientific and technological research might be initiated and to initiating new international co-operative research projects.

Method of work: Pending: decision to be taken by the Senior Advisers at their ninth session.

| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

10.3.2. Co-operative technological forecasting and scientific and technological research related to new energy sources

cont.

Description: Assessments will be undertaken of technological forecasting methodologies as well as procedures for performing international co-operative forecasts related to new energy sources with a view to improving the quality and level of such forecasts; reviews will be undertaken of national research and development efforts relating to new energy sources with a view to identifying possible international co-operative research and development projects.

Method of work: (i) Work relating to the outcome of the Seminar on Co-operative Technological Forecasting: solar energy - pending; (ii) a Seminar on Technologies related to New Energy Sources will be held in the Federal Republic of Germany in 1980, and the secretariat will prepare a synthesis of the conclusions arising from the Seminar and recommendations for future action for consideration by the Senior Advisers at their ninth session; and (iii) 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.

10.3.3. Scientific and technological research related to existing energy sources - the utilization of low-calorific-value fuels

3

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

| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

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 Senior Advisers to ECE Governments on Environmental Problems; (ii) The Senior Advisers will hold joint biennial 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; the first joint biennial ad hoc meeting will be held in the Bulgarian Laboratory in late 1980 or early 1981. 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 at their ninth session and other Principal Subsidiary Bodies concerned on the progress of research and the perspectives for implementation of the developments; and (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.

10.3.4. Expansion and promotion of multilateral co-operation

cont.

Description: Studies of the possibilities for expanding and promoting multilateral co-operation in scientific and technological research and on the organization, management and evaluation of such activities will be undertaken with a view to identifying new areas for co-operation and developing practical aids for use by those directly involved in planning, managing, evaluating and undertaking multilateral co-operative research activities.

| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

Method of work: The secretariat will proceed with the preparation of a preliminary version of the Guide on the organization and management of international co-operative research and prepare a progress report for consideration and final decision by the Senior Advisers at their ninth session.

10.3.5. Contribution to the follow-up of the United Nations Conference on Science and Technology for Development (UNCSTD)

| | |
|---|------|
| 2 | 1981 |
|---|------|

Description: Proposals will be prepared on possible contributions which the ECE might make to the follow-up of the Conference.

Method of work: The secretariat will prepare proposals for consideration by the Senior Advisers at their ninth session on possible contributions which the ECE might make to the follow-up of the Conference.

WORK AREA 10.4: TRANSFER OF TECHNOLOGY

10.4.1. Measures to promote the transfer of technology

cont.

Description: Research will be undertaken on legal, economic, administrative and institutional factors affecting the transfer of technology within the ECE region, taking into account the facilitation of, and the difficulties in, the transfer of technology between countries with different economic and social systems and at different levels of economic development. Initiatives will be taken to improve intraregional flows of technology and to develop an information base for enterprises involved in the international transfer of technology in the ECE region.

Method of work: (i) Studies will be undertaken of problems affecting the transfer of technology in selected industrial sectors and/or activities for review by ad hoc meetings or seminars will be

| | |
|-------------------------------------|----------------------------------|
| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|

carried out; and (ii) a Seminar will be convened in association with the Committee on the Development of Trade in 1981 in Warsaw (Poland) on "Trends in different forms of technology transfer and their impact on the development of trade and economic co-operation".

10.4.2. Preparation of manuals and aids related to specific aspects of the transfer of technology

cont.

Description: In co-operation with the Committee on the Development of Trade, manuals and aids will be prepared related to specific aspects of the transfer of technology with a view to making available to enterprises practical information for use by those responsible for planning, negotiating, and executing activities involving the transfer of technology.

Method of work: (i) ECE member Governments still intending to contribute to the Manual will indicate the possible date of transmission to the ECE secretariat of their country chapters before the end of February 1980; and (ii) subject to review when experience in the use of the Manual is considered at the Seminar in Warsaw (Poland), the Manual will be updated in accordance with the method outlined in paragraph 7 of document SC.TECH./R.88: TRADE/R.393, with the exception that Governments will inform the secretariat, preferably once every two years, of relevant changes.

10.4.3. Development of the statistics of science and technology

cont.

Description: In co-operation with the Conference of European Statisticians and UNESCO, 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. As a first stage, the Senior Advisers

| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

in co-operation with the Conference of European Statisticians and UNESCO will carry out activities with a view to identifying and better defining indicators which can be used to measure the levels of technology transfer taking place among ECE member countries.

Method of work: In accordance with the agreement reached at the twenty-seventh session of the Conference of European Statisticians, "an informal meeting on statistics on the transfer of technology will be held, jointly with the Senior Advisers to ECE Governments on Science and Technology and UNESCO ... to consider an analysis of the information collected on national practices and views, and ... the results of this meeting will be reviewed by the fourth meeting on statistics of science and technology to be held under the joint auspices of the Conference, the Senior Advisers to ECE Governments on Science and Technology and UNESCO", scheduled to take place towards the end of 1980 in Paris at the invitation of UNESCO. The secretariat will report on this matter to the Senior Advisers at their ninth session.

11.- ECONOMIC PLANS, PROGRAMMES AND PERSPECTIVES

| <u>Estimated duration (in years)</u> | <u>Estimated termination year</u> |
|--|---|
|--|---|

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.

| | |
|-------------------------------------|----------------------------------|
| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|

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 24-28 March 1980 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.

| | |
|-------------------------------------|----------------------------------|
| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|

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> |
|--|---|
|--|---|

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.

Method 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.

Method 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.

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.

Method of work: Consideration at plenary sessions of questions concerning the development and improvement of

| <u>Estimated duration (in years)</u> | <u>Estimated termination year</u> |
|--|---|
|--|---|

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.

Method 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 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.

Method 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.

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.

Method of work:

- (a) ISIS '79: preparatory work for (by national statistical offices) and seminar on the following subjects: general architecture of computerized statistical information systems; statistical data dictionaries/directories; and data editing.

1

1979

| | Estimated duration (in years) | Estimated termination year |
|---|-------------------------------------|----------------------------------|
| (b) Preparatory work for the seventeenth session of the Working Party: preparation of papers on the following subjects: generalized computer programs (further round of national reports); draft directory of generalized programs (secretariat); draft report of group of rapporteurs on computer aspects of the use of registers in statistical offices; reports of ISIS; report on activities of the Computing Research Centre, Bratislava; development and experience in the field of automated data banks (national reports); the interdependence of trends and requirements in computing technology and statistical services (national reports); various aspects of distributed processing, including organizational, hardware and software problems (national and international statistical offices); impact of mass storage devices on statistical processing (Sweden); use of procedural and non-procedural interactive languages (national reports); data processing aspects of the 1980 population and housing censuses (Hungary and Romania); seventeenth session of the Working Party on these topics with as the major topic the subject of distributed processing (1980/81). | 2 | 1981 |
| (c) Preparatory work for later sessions of the Working Party on the following subjects: precision of data in statistical data files; geographical co-ordinates in statistical processing; disclosure techniques and selected other subjects. | 3 | 1982 |
| (d) Preparatory work for later ISIS seminars. | cont. | |

12.2.2 Statistical methodology

Description: Study of problems of quality, accuracy and timeliness and similar methodological questions in official statistics and of ways of solving them.

Method of work:

- (a) 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; implications of the methodology of surveys for the adequate use of survey results in the consideration of policy decisions (exchange of information in 1979/80; and arrangements for the preparation of guidelines

| | <u>Estimated duration (in years)</u> | <u>Estimated termination year</u> |
|--|--|---|
| for the presentation of the quality of survey results (with the assistance of interested countries). | 2 | 1981 |
| (b) In the light of the results of the work referred to under (a), consideration of terms of reference for and timing of a meeting in the field of statistical methodology (twenty-eighth plenary session); meeting on statistical methodology. | 2 | 1981 |
| 12.2.3 <u>Organization and operation of statistical offices</u> | | |
| <u>Description:</u> Study of problems relating to the organization, operation and management of statistical services, requiring top-level decisions. | | |
| <u>Method of work:</u> | | |
| (a) Consideration at the twenty-eighth plenary session of the following topics: | | |
| (i) Problems arising in the integration of modern data processing techniques into statistical services, including the identification of developments requiring top-level decisions (preparatory work: preparation of a discussion paper, based on the material submitted by countries prior to the twenty-seventh session (United States); three countries (German Democratic Republic, Yugoslavia and one other country) to act as invited discussants at the twenty-eighth session). | | |
| (ii) Measurement of and reporting on the quality of statistics and the balancing of quality against timeliness (preparatory work: preparation of issue-oriented paper on timeliness versus other quality attributes in statistics (Sweden); preparation of brief papers by discussants (Poland, Spain, USSR and United Kingdom); circulation of the basic paper and papers of discussants prior to the plenary session). | 1 | 1980 |
| (b) Consideration at the twenty-ninth plenary session of the following topics: | | |
| (i) Problems of presentation, publication, dissemination and interpretation of data (development of the dissemination function of statistical offices in the light of modern communications technology; forms of communication between users and producers of statistics; methods and resources used for | | |

| | <u>Estimated duration (in years)</u> | <u>Estimated termination year</u> |
|--|--|---|
| dissemination; priorities in dissemination with respect to different groups of users; ways and means to secure an adequate publicity; public relations problems): collection of views on issues to be discussed; consideration of terms of reference at the twenty-eighth session. | | |
| (ii) Possibilities of replacing exhaustive statistical inquiries by sample surveys: collection of views on issues to be discussed; consideration of terms of reference at the twenty-eighth session. | 2 | 1981 |
| (c) Topic for discussion at the thirtieth plenary session: ways and methods to adapt statistics to users' needs. | 3 | 1982 |
| (d) Consideration of terms of reference for a seminar on new technology for statistical work and applications (1979/80); seminar on the topic (1981/82). | 3 | 1982 |

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 co-ordinating existing international programmes 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.

Method of work:

- | | | |
|--|---|------|
| (a) Continuation of the review of SNA; meeting to consider (i) the progress made in the review and to examine proposals for clarification, amendments and extension of SNA arising from the review; (ii) the progress in work on MPS and SNA/IPS links; and (iii) further work on the co-ordination of economic statistics with the national accounts and balances (early 1980). | 2 | 1981 |
| (b) 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 (1979/80); further development of the conceptual framework and extension to related areas, e.g. balance sheets. | 2 | 1981 |
| (c) Preparation of proposals concerning work on the co-ordination of economic statistics with the | | |

| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

national accounts and balances, for consideration
at the meeting on the review of SNA and MPS.

1

1980

12.3.2 Promotion of publication and dissemination of internationally comparable statistics on production, national income and productivity

Description: Promotion of bilateral and multilateral
comparisons of corresponding national accounting
aggregates, productivity, etc.

12.3.2.1 Comparison of relative income differences within the population

Description: Conduct of a continuing development
programme for international comparisons of the
distribution of incomes.

Method of work: Preparatory work (exchange of informa-
tion, special studies, etc.) on methodological problems
which have so far not been solved: notably on procedures
for elimination of distortions from partial and total
non-response, adjustments for filling gaps resulting
from the non-reporting, under-reporting or omission of
incomes and elaboration of a scale of consumption units
suitable for income studies; conditional to the success
of this preparatory work: conduct of another comparison
of relative income differences at a convenient time. cont.

12.3.2.2 International comparisons

Description: Comparison within the ICP framework for
the European region, comparison of consumption and
capital formation (Austria/Poland) and other compari-
sons of corresponding aggregates.

Method of work:

- (a) Completion of the Austria/Poland comparison of
consumption and capital formation.
- (b) Organization of a comparison within the ICP
framework for the European region: preparation of
a list of representative items (preparation of
draft list, by Austria, October 1979; circulation
of list for comment, end 1979; informal meeting
to finalize the list and discuss other ICP require-
ments, 1980, first quarter); collection,
submission and processing of the data by national
statistical offices, with special responsibilities
of Austria; Statistical Office of the European
Communities, ECE secretariat and UN Statistical

1

1979

| <u>Estimated duration (in years)</u> | <u>Estimated termination year</u> |
|--|---|
|--|---|

Office (collection and submission of price data for representative items, compilation of purchasing power parities for detailed categories, elaboration of expenditure categories, conversion into international values, review of results and correction of data, years 1980 and 1981); informal meeting to review the results and to consider the ways of combining the European comparisons into an intra-regional comparison and the methods of linking the results with the global ICP comparison (1981/82).

| | |
|---|------|
| 3 | 1982 |
|---|------|

- (c) 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.

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 classification of economic activities.

Method of work: A study of the points of correspondence and difference between the ISIC and the CMEA classification 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).

| | |
|---|------|
| 3 | 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.

| <u>Estimated duration (in years)</u> | <u>Estimated termination year</u> |
|--|---|
|--|---|

Method of work: Study of the points of correspondence and difference between UN and CMEA classifications of goods and services; 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).

| | |
|---|------|
| 3 | 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 correspondence table between the SITC and the SFTC; development, on the basis of the correspondence table, of an operational key for the conversion of data classified according to the SFTC into SITC categories (and vice versa).

Method of work: Testing of the revised correspondence table and draft conversion key between the SITC, Rev.2 and the SFTC in terms of actual statistics (by Austria and Hungary); a second consultation to finalize the key; and development of a key for the conversion of SITC data into SFTC categories.

| | |
|---|------|
| 1 | 1980 |
|---|------|

12.3.4.2 Price and quantity statistics

Description: Development and improvement of statistical measures of prices and quantities in foreign trade.

Method 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 when there are sufficient new developments to warrant further consideration.

12.3.4.3 Concepts and definitions in foreign trade statistics

Description: Revision of international recommendations concerning concepts and definitions in foreign trade statistics.

Method of work: Participation in the work of the Statistical Commission on definitional and conceptual problems in foreign trade statistics; informal meeting to consider a draft report on the revision of concepts and definitions (1979/80).

| | |
|---|------|
| 1 | 1980 |
|---|------|

| | Estimated duration (in years) | Estimated termination year |
|---|-------------------------------------|----------------------------------|
| 12.3.5 <u>Price and quantity statistics</u> | | |
| <u>Description:</u> 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 | | |
| <u>Description:</u> Study of the methodological problems involved in the compilation of statistics of consumer prices (jointly with ILO). | | |
| <u>Method 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); consideration at twenty-eighth plenary session of the terms of reference for a further meeting, tentatively scheduled for 1980/81. | 2 | 1981 |
| 12.3.5.3 Price and quantity measures in services | | |
| <u>Description:</u> Study of the methodological problems involved in the measurement of prices and quantities in services. | | |
| <u>Method 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 in 1979/80. | 1 | 1980 |
| 12.3.6 <u>Public sector statistics (including State budget)</u> | | |
| <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 government. | | |
| <u>Method 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. | 2 | 1981 |

| | Estimated duration (in years) | Estimated termination year |
|---|-------------------------------------|----------------------------------|
| 12.3.7. <u>Other selected subjects in economic statistics</u> | | |
| <u>Description:</u> Preparation and revision of international 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>Method of work:</u> | | |
| (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 and corresponding balances (by the joint secretariats); further work on income and outlay accounts and capital formation accounts (by the joint secretariats). | 1 | 1980 |
| (b) Review and updating of earlier recommendations on statistics and balances for meat and milk; completion of work on production and utilization statistics of other products (potatoes, sugar beets, sugar, oilseeds, oil crops and oil); informal meeting on statistics of oilseeds, oil crops and oil (1979/80); meeting of the Study Group (1980/81). | 2 | 1981 |
| (c) 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 | 1980 |
| (d) 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 (1979/80). | 1 | 1980 |
| (e) 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 |
| (f) Preparation of a glossary of terms used in agricultural statistics in the working languages of the region. | 2 | 1982 |
| (g) Over-all review of agricultural statistics in the light of developments of data requirements; | | |

| | Estimated duration (in years) | Estimated termination year |
|---|-------------------------------------|----------------------------------|
| preparation of a draft programme, serving as a framework for the systematic presentation of the data requirements; meeting to consider the draft programme. | 3 | 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.

Method of work:

- | | | |
|---|---|------|
| (a) Elaboration of definitions for use in the overall energy balance (by the secretariat, in co-operation with other international organizations); circulation of draft definitions to countries for comments; finalization of the definitions. | 1 | 1980 |
| (b) Further development of statistics on final consumption of energy (purposes for which energy is used and characteristics of energy required for particular uses; quantities of useful energy consumed by final consumption categories); development of energy statistics in monetary terms and linking them to the existing statistics in monetary terms, such as the national accounts and balances; study of the methodological problems involved in the development of statistics for renewable forms of energy; meeting on general energy statistics to consider these subjects. | 4 | 1983 |

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).

Method of work:

- (a) 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

| | Estimated duration (in years) | Estimated termination year |
|---|-------------------------------------|----------------------------------|
| 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 informal meeting on transfer of technology (1980) to consider the availability of statistics and their interpretation and to make recommendations on the suitability of present indicators and on the possible need for new indicators. | 1 | 1980 |
| (b) 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 (end 1980). | 2 | 1981 |
| 12.3.7.5 Statistics of tourism | | |
| <u>Description:</u> Preparation of international guidelines for statistics of tourism. | | |
| <u>Method of work:</u> 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 WTO). | | |
| 12.3.7.6 Enterprise statistics | | |
| <u>Description:</u> Development of statistics for enterprise-type statistical units. | | |
| <u>Method of work:</u> 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 | 1980 |

| | Estimated duration (in years) | Estimated termination year |
|---|-------------------------------------|----------------------------------|
| <u>WORK AREA 12.4: DEVELOPMENT AND HARMONIZATION OF SOCIAL AND DEMOGRAPHIC STATISTICS</u> | | |

12.4.1 Framework for the integration of social and
demographic statistics

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.

Method of work:

- | | | |
|--|---|------|
| (a) Continuation of the work on harmonization of concepts, definitions and classifications, with priority for age group classifications, family and household concepts and definitions and classifications of these units and time units and reference periods; a test of the usefulness of the socio-economic classification recommended for use in the 1980 population and housing censuses in the ECE region; preparation of (i) progress report on links among economic, social and demographic statistics (UNSO) and (ii) paper on statistics on the socio-economic structure and social mobility of the population in the context of the FSDS; a test of the extent to which the series and structure proposed in Towards an SSDS are capable of providing the social indicators specified by different international organizations; meeting of the Working Party to consider the subjects on which sufficient progress has been made (1980/81). | 2 | 1981 |
| (b) Further work on this project to be considered later in the light of the progress made and experience gained. | 2 | 1983 |

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> |
|--|---|
|--|---|

Method of work: 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).

| | |
|---|------|
| 2 | 1981 |
|---|------|

12.4.3 Population and housing censuses

Description: Review of implementation of the recommendations for the 1980 population and housing censuses in the ECE region; preparatory work for the 1990 census recommendations.

Method of work: Formulation of proposals concerning the publication of the 1980 census data for consideration at the twenty-eighth plenary session (secretariat); preparatory work for and meeting on the evaluation of the census results and methodology (1983).

| | |
|---|------|
| 4 | 1983 |
|---|------|

12.4.4 Selected problems in social statistics

Description: 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

Description: 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).

Method of work: Meeting on manpower statistics to (i) review current national practices in compiling manpower statistics from various sources and plans for developing these statistics to meet new analytical needs; (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 | 1980 |
|---|------|

| | |
|-------------------------------------|----------------------------------|
| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|

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).

Method 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).

| | |
|---|------|
| 2 | 1981 |
|---|------|

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).

Method 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 (end 1980).

| | |
|---|------|
| 2 | 1981 |
|---|------|

| <u>Estimated duration (in years)</u> | <u>Estimated termination year</u> |
|--|---|
|--|---|

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).

Method of work:

- | | | |
|--|---|------|
| (a) Preparatory work for and meeting of a small group of interested countries to (i) elaborate the classification of cultural spheres in the form of a matrix of cultural spheres and cultural functions and (ii) examine in more detail lists of cultural activities, cultural goods and services and cultural occupations. | 2 | 1981 |
| (b) Establishment of small groups of countries to work on specific categories of the framework, methodological issues and other related topics. | 3 | 1982 |
| (c) Third joint meeting to consider the scope, structure and contents of the framework as a whole. | 4 | 1983 |

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).

Method 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

| | <u>Estimated duration (in years)</u> | <u>Estimated termination year</u> |
|--|--|---|
| in defining their requirements); (iv) meeting on these subjects (1980/81). | 2 | 1981 |

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.

Method 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 | 1981 |
|---|------|

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.

Method of work:

(a) Regular exchange of statistics of long-term migration by country of last or intended residence; inclusion of a breakdown by citizenship groups beginning with the data for 1980.

cont.

(b) Further bilateral and multilateral studies to examine reasons for differences between data for corresponding flows.

| | |
|---|------|
| 3 | 1982 |
|---|------|

(c) Collection of information on national practices in compiling statistics of the alien stock for intercensal periods.

| | |
|---|------|
| 1 | 1982 |
|---|------|

(d) Meeting to review progress in improving coverage and comparability of statistics of long-term migration and in developing statistics of short-term migration and to consider analysis of practices in compiling statistics of the alien stock and possible action to organize a regular exchange of these statistics.

| | |
|---|------|
| 1 | 1983 |
|---|------|

| | <u>Estimated duration (in years)</u> | <u>Estimated termination year</u> |
|--|--|---|
| 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 sub-systems 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.

Method of work: Collection of information on national practices in compiling current population estimates to update the information available at present; further preparatory work (by the secretariat) and meeting in 1979/80 to: (i) prepare recommendations concerning the compilation of current population estimates; (ii) review the draft guidelines on age group classifications being prepared by UNSO; and (iii) consider the problems involved in the co-ordination of statistics of households and families and make proposals for work on this subject.

2 1980

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.

Method of work: Preparatory work for (by the secretariat) and meeting on projections of households and families (timing to be considered later).

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).

| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

Method of work:

- | | | |
|---|---|------|
| (a) Frameworks for the co-ordination and development of environmental statistics: comparative survey of national compilations of environmental statistics (secretariat) (1979); 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. | 2 | 1981 |
| (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 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. | 4 | 1983 |
| (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); preparatory work for and seminar on environmental statistics (1980) (terms of reference to be finalized after consideration by the SAEP). | 1 | 1980 |

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.

Method of work: Informal meeting to consider questions that might be included in the work programme (1979/80); preparatory work for and meeting on selected methodological topics, if required (1980/81).

| | |
|---|------|
| 2 | 1981 |
|---|------|

| <u>Estimated duration (in years)</u> | <u>Estimated termination year</u> |
|--|---|
|--|---|

12.5.4 Statistics of land use

Description: Elaboration of a standard international classification of land use; consideration of various methodological aspects, which are of special importance to the collection, compilation and presentation of land use statistics.

Method of work: Preparatory work for (by the secretariat and national rapporteurs) and meeting on land use statistics to: (i) consider a draft recommendation for a standard international classification of land use; (ii) review recent developments in the use of particular data collection techniques (such as the extraction of data from existing registers, the application of satellite imagery and of aerial photography); (iii) review the linkages between land use statistics and other data systems (such as agricultural censuses, housing and population censuses, etc.), including problems of transforming cartographical into numerical information; (iv) review ecological dimensions of land information.

1

1980

13. - STEEL

| | |
|-------------------------------------|----------------------------------|
| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|

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 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.

cont.

| | |
|-------------------------------------|----------------------------------|
| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|

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

1984

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

1984

| | |
|-------------------------------------|----------------------------------|
| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|

13.3.2.2 Production and supply of metallurgical coke

Description: The Committee decided at the forty-sixth session to begin work on this subject in 1979. At the ad hoc Meeting of Experts, 21-22 February 1979, the agreed objectives would be to try to determine if there will be a surplus or shortage of metallurgical coke in the 1980's and if technological changes in iron, steel and coke production have recently or will affect the supply and demand for coke in the future.

Method of work: The ad hoc Meeting of Experts determined the outline of the study based on proposals of several countries and requested the secretariat to prepare a detailed questionnaire. The possibility of using government rapporteurs for helping with the preparation of the final draft of the study will be considered at the next meeting which is tentatively scheduled for February 1980.

| | |
|---|------|
| 2 | 1981 |
|---|------|

13.3.3 Economic problems related to the creation of steel plants using direct reduction

Description: The Committee will consider in which way this topic will be analysed, taking into account the results of the Bucharest Seminar, 1976.

Method of work: Dependent on the definition of the topic.

| | |
|---|------|
| 2 | 1984 |
|---|------|

13.3.4 Steel use in public works, infrastructure and construction

Description: The general theme of the Symposium is the optimal use of steel, and in particular new steel products, in the various building construction sectors. Priority is being given to those sectors or applications where the properties of steel and the advantage of using steel are not being sufficiently exploited at present.

Method of work: The programme for this Symposium was determined at the Preparatory Meetings (15-16 February and 22-23 October 1978) and will take place 21-25 January 1980 at Geneva, Switzerland.

| | |
|---|------|
| 1 | 1980 |
|---|------|

| | |
|-------------------------------------|----------------------------------|
| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|

13.3.5 The use of steel in shipbuilding

Description: The objectives of this Seminar are the exchange of experience and views on how far the steel industry, its technology and production facilities, meets the requirements of the ship designers and shipbuilders with respect to the range and quality of its steel products.

Method of work: The Seminar will be held in Katowice (Poland) from 15 to 19 September, 1980. At the Preparatory Meeting, 19-20 February 1979, the programme was agreed upon. A second (informal) Preparatory Meeting is scheduled for February 1980.

| | |
|---|------|
| 1 | 1980 |
|---|------|

13.3.6 The evolution of the specific consumption of steel

Description: The study will examine the specific consumption of steel by the main consuming sectors, its past evolution and future trends.

Method of work: The initiating country, the Netherlands, will provide an outline for the study by the end of 1979. The secretariat will investigate the existence of relevant data and studies undertaken by other international organizations. All this information will be presented to the first ad hoc Meeting for the study in October 1980.

| | |
|---|------|
| 2 | 1982 |
|---|------|

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. The ad hoc Meeting of Experts (26-27 June 1979) agreed upon an outline and several countries offered to prepare parts of the study. A second meeting is scheduled for June 1980.

| | |
|---|------|
| 2 | 1981 |
|---|------|

| <u>Estimated duration (in years)</u> | <u>Estimated termination year</u> |
|--|---|
|--|---|

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

1984

13.4.3 Strategy for energy use in the iron and steel
industry

Description: As a follow-up to its study on "Production and supply of metallurgical coke", the Steel Committee will examine the strategy of utilizing the various forms of energy in the iron and steel industry.

Method of work: Czechoslovakia and the USSR will provide an outline for the study by the end of 1979, which will be circulated by the secretariat. An ad hoc Meeting for this study is scheduled for February 1981.

2

1983

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

1985

| 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 questionnaire agreed to by the Committee.

cont.

14. - TIMBER

| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

WORK AREA 14.1: MEDIUM AND LONG-TERM TRENDS AND PERSPECTIVES

14.1.1. Review of projections made in study "European Timber Trends and Prospects, 1950 to 2000" in relation to actual developments

Description: The Committee will keep under review long-term trends in production, trade, consumption and prices of forest products, comparing them with projections made in the long-term study, both to check the accuracy of the analyses presented in the study and in order to provide early warning of changes in trends, thus enabling Governments to review their long-term forest policies in the light of recent developments.

Method of work: The Committee will compare, on a continuing basis, real trends with the projections of the long-term study, as an integral part of its analyses of specific aspects of the forest products sector (notably under projects 14.1.2., 14.1.3., 14.2.1.). In addition, the secretariat will prepare an over-all study which will compare real trends up to 1980 with projections.

cont.

14.1.2. Medium-term trends in the structure and capacity of the wood-processing industries

14.1.2.1. The wood-based panels industries

Description: The Committee will review the structure and capacity of the wood-based panels industries in order to enable Governments to form their own industrial policies for the wood-based panels sector in the light of information on international conditions.

Method of work: The Committee will decide at its thirty-eighth session on the scope and orientation of its activities in this field in the light of the survey carried out in 1979/80 based on the simplified questionnaire drawn up by the FAO/ECE Working Party on Forest Economics and Statistics.

cont.

14.1.2.2. The sawmilling industry

Description: The Committee will review the structure and capacity of the sawmilling industry in order to enable Governments to form their policies for the sawmilling industry in the light of information of international conditions.

Method of work: The Committee will undertake surveys at six-yearly intervals (next survey in 1984). An informal team of specialists will be convened by the Joint FAO/ECE Working Party on Forest Economics and Statistics before the 1984 study is started to prepare recommendations on how the study should be prepared.

cont.

| | |
|-------------------------------------|----------------------------------|
| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|

14.1.3. Medium-term trends in the markets for
specific forest products

Description: The Committee will review medium-term (3-5 years) trends in the production, consumption, trade and prices of major forest products so that Governments may be continuously informed of structural trends in the forest products markets of the ECE region.

Method of work: The secretariat will prepare one study annually, on a three-year rotation of subjects, as follows: Sawntwood and sawlogs: 1981, 1984, etc.; pulpwood (including residues and chips), pitprops and miscellaneous roundwood: 1982, 1985, etc.; wood-based panels: 1980, 1983, etc. The secretariat will prepare at intervals as will be decided, a review of trends in roundwood production and supply.

cont.

14.1.4. 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: The Committee will convene an ad hoc meeting in (year to be decided) on the production and marketing of products of specific interest to Mediterranean forestry, including cork and resin; and other such meetings, as the need is identified. All activities under this project will be carried out in co-operation with the FAO European Forestry Commission.

cont.

WORK AREA 14.2: CURRENT MARKET DEVELOPMENTS 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.

| <u>Estimated duration (in years)</u> | <u>Estimated termination year</u> |
|--|---|
|--|---|

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: The Committee's co-ordinator on transport and handling problems will make recommendations to the Committee for work in this field, as and when appropriate.

cont.

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.

| | Estimated duration (in years) | Estimated termination year |
|---|-------------------------------------|----------------------------------|
| 14.2.4. <u>Standardization of stress grading of coniferous sawn timber</u> | | |
| <p><u>Description:</u> The Committee will encourage the application of the ECE recommended standard by incorporation of its provisions into the 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.</p> <p><u>Method of work:</u> 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 traded 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 <u>ad hoc</u> meeting will be convened after 1980 to review and, if necessary, update the recommended standard. (Work to be linked to project 14.2.5.).</p> | | |
| | 4 | 1982 |
| 14.2.5. <u>Standardization of finger-jointing in structural coniferous sawn timber</u> | | |
| <p><u>Description:</u> 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.</p> <p><u>Method of work:</u> 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 <u>ad hoc</u> meeting will be convened after 1980 to review and, if necessary, update the recommended standard. (Work to be linked to project 14.2.4.).</p> | | |
| | 4 | 1982 |
| 14.2.6. <u>Reduction of the number of standard dimensions of sawnwood entering international trade</u> | | |
| <p><u>Description:</u> 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.</p> <p><u>Method of work:</u> 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.</p> | | |
| | 3 | 1981 |

| | |
|-------------------------------------|----------------------------------|
| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|

14.2.7. 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 (e.g. the CCC Harmonized System, ICGA, SITC) and developments in technology and industrial and trade practice and the appearance of new products.

Method of work: An ad hoc meeting will be convened to consider and incorporate proposals by countries and competent organizations for modifications to the FAO Classification and submit a draft revised version to the thirteenth session of the Joint Working Party.

2 1982

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 on the production, marketing and use of finger-jointed sawnwood will be held in Norway in 1980.

2 1980

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 organization 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.

| | |
|-------------------------------------|----------------------------------|
| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|

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 Spain in 1980.

cont.

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 1981 and another in Portugal in 1983.

5

1983

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

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 the Netherlands (subject to confirmation) in 1981, preceded by a preparatory meeting of a team of specialists.

2

1981

| | |
|-------------------------------------|----------------------------------|
| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|

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 |
|---|------|

14.3.1.1.6. Review of standardization activities in the field of forest 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 team 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 meetings and to have them discussed, approved and then disseminated within the framework of the Joint Committee.

cont.

1/ Host country to be decided.

| <u>Estimated duration (in years)</u> | <u>Estimated termination year</u> |
|--|---|
|--|---|

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 1983, 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 1981 in Sweden.

1

1981

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

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

| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

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 |
|---|------|

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 |
|---|------|

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 1980 in Norway, on vocational training and extension services for small-scale forest owners and farmers; in 1982 (subject to confirmation) in the United Kingdom, on the selection of machine operators and assessment of their suitability for specific jobs: in (year to be decided), in ... ^{1/} on vocational training problems specific to southern Europe.

cont.

^{1/} Host country to be decided.

| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

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. 1981, 1983, etc.). In 1981, a seminar will be held on applied ergonomics and safety and health in highly mechanized logging operations (in collaboration with IUFRO) in Canada (subject to confirmation).

cont.

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

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 1981 on applied ergonomics and safety and health in highly mechanized logging operations (see sub-section 14.3.1.3.3.).

2

1981

| | |
|-------------------------------------|----------------------------------|
| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|

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

14.3.2. 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 produces and to identifying opportunities for expanding trade with developing countries.

Method of work: The secretariat will explore with the secretariats of UNCTAD and FAO the possibilities for co-operation between the Timber Committee, UNCTAD and FAO on the markets for tropical timber and report back to the Committee's thirty-eighth session

cont.

14.3.3. 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 study undertaken for the Joint FAO/ECE Working Party on Forest Economics and Statistics will be revised and published.

1 1980

| | |
|-------------------------------------|----------------------------------|
| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|

14.3.4. 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: Possible further work to be decided upon by the thirty-eighth session in the light of the report of the symposium on economic and technical developments in the furniture industry.

| | |
|---|------|
| 1 | 1980 |
|---|------|

14.3.5. 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 on Wood-based panels in the 1980s: economic and technical perspectives will be held in Finland in 1980. The Committee's thirty-eighth session will decide upon future work in the light of the results of the symposium.

| | |
|---|------|
| 2 | 1980 |
|---|------|

14.3.6. Review of progress made in the chemical processing of wood (other than for pulp and paper) and the potential 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-eighth session, on the basis of which it will decide on further action.

| | |
|---|------|
| 1 | 1980 |
|---|------|

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).

| | Estimated duration (in years) | Estimated termination year |
|---|-------------------------------------|----------------------------------|
| 14.4.1. <u>Quantification and evaluation of the environmental benefits of forests</u> | | |
| <u>Description:</u> 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 facilitate comparisons between countries. | | |
| <u>Method of work:</u> A draft enquiry on environmental and non-wood uses of forests will be finalized after being reviewed by countries. Countries will be invited to submit results of studies quantifying the benefits of non-wood uses of forests for consideration by the thirteenth session of the Working Party, which will decide on further work in this field. Project linked with project 14.5.2.3. | | |
| | 2 | 1981 |
| 14.4.2. <u>Conservation of the forest resource through the improved utilization of forest products and the reduction of waste</u> | | |
| <u>Description:</u> The Committee will assess ways of conserving the forest resource by reducing the volume of forestry and wood-working residues and expanding their use, by improving and rationalizing the utilization of forest products, and by increasing their durability through wood preservation. | | |
| <u>Method of work:</u> A symposium will be held in the USSR in 1982. A preparatory meeting for the symposium will take place in 1980 to draw up proposals for the scope, objectives and programme | | |
| | 2 | 1982 |
| 14.4.3. <u>Energy aspects of the forest industries</u> | | |
| <u>Description:</u> 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. | | |
| <u>Method of work:</u> The secretariat will present to the Committee's thirty-eighth session proposals for future work by the Committee in this field, prepared after consultation with the office-holders and the members of the team of specialists convened under project 14.5.3.4. | | |
| | 1 | 1980 |

| <u>Estimated duration (in years)</u> | <u>Estimated termination year</u> |
|--|---|
|--|---|

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, together with projects 14.5.3., 14.5.4. and 14.5.5.(part), is covered by the activities of the Joint FAO/ECE Working Party on Forest Economics and Statistics which normally meets biennially (1981, 1983, etc.). It co-operates with the Conference of European Statisticians.

14.5.2.1. 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: Periodic reviews will be undertaken by the Working Party, which will formulate proposals for improving the Committee's programme of collection and dissemination of statistical data with regard to its organization, method of collection, periodicity, and the improvement of the accuracy and comparability of data obtained from and used by Governments. cont.

14.5.2.2. 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.

| | |
|-------------------------------------|----------------------------------|
| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|

14.5.2.3. 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 users.

Method of work: Outlines of enquiries on forest resources for wood and fibre production and on environment and non-wood uses of forests (see project 14.4.1.) will be submitted to countries to ascertain the availability of data and the form in which they are available. Draft enquiries will be prepared on the basis of countries' replies and submitted to the thirteenth session of the Working Party, before being finalized and despatched to countries.

4

1984

14.5.2.4. 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 study on forestry labour statistics will be revised after countries have been invited to check, update and complete their data. The final version of the study will be published in 1980. The thirteenth session of the Working Party will consider revision of the study at regular intervals.

2

1981

14.5.2.5. Utilization of forest products by end-use sectors

Description: The Working Party will collect information on the utilization of forest products by end-use sectors and undertake analyses of utilization trends and patterns which will be submitted to the Timber Committee to form part of its continuing analysis of medium- and long-term market developments, with a view to providing Governments with information necessary for the elaboration of their forest products utilization policies.

Method of work: End-use statistics will be collected periodically by means of enquiries and analyses carried out by the Working Party, which will consider at its fourteenth session appropriate directions for activities in this field and methods of work.

2

1983

| | |
|-------------------------------------|----------------------------------|
| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|

14.5.2.6. 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 review the results of an enquiry at its thirteenth session and draw up proposals concerning the regular collection of statistics in this field. 2 1981

14.5.3. Studies of selected economic problems

14.5.3.1. Economic aspects of the fuller use of the forest biomass

Description: The Working Party will study the economic aspects of the fuller use of the forest biomass with a view to determining the potential for the forest resource to meet the demand for raw material from the different wood-using industries and consumption sectors.

Method of work: A team of specialists will collect and review information in this field and present a report to the thirteenth session of the Working Party. 2 1981

14.5.3.2. Economic aspects of afforestation and reforestation

Description: The Working Party will study the economic aspects of afforestation and reforestation with the object of comparing the efficiency of different methods and the relative costs and returns in different countries under different conditions.

Method of work: Taking account of the relevant work of the Joint FAO/ECE/ILO Committee on Forest Working Techniques and Training of Forest Workers and collaborating where appropriate (see project 14.3.1.1.1.), a team of specialists will collect and review information on the economics of afforestation and reforestation and present a report to the thirteenth session of the Working Party. 2 1981

14.5.3.3. Economic aspects of the introduction of new forest machines and equipment

Description: The Working Party will study the economic aspects of the introduction of new forest machines and equipment with the object of assessing their productivity and return on investment in different countries and under different operating conditions.

Method of work: Taking account of the relevant work of the Joint FAO/ECE/ILO Committee on Forest Working Techniques and Training of Forest Workers and collaborating where appropriate (see project 14.3.1.2.1.), a team of specialists will collect and review information on the economics of introducing new machines and equipment into forestry and report to the fourteenth session of the Working Party. 2 1983

| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

14.5.3.4. Economic and statistical studies on wood/energy questions

Description: The Working Party will examine the generation of energy from wood and energy consumption by the forest industries, with a view to assessing the effects of developments in the energy field on the forest sector and the contribution of wood to national energy balances, thereby to provide Governments with information needed for policy-formulation in this area.

Method of work: A team of specialists will assess the availability of statistical and other information on these subjects as well as work in hand at the national and international level and formulate recommendations for the Working Party at its thirteenth session.

2 1981

14.5.4. Transfer of economic and statistical methods and experience in the forest and forest products sector

Description: The Working Party will contribute to the building up of statistical services in countries inside and outside the ECE region through the transfer of know-how and experience in methods of data collection, assembly and dissemination in the forest and forest products sector.

Method of work: A team of specialists will draw up proposals for the consideration at the Working Party's thirteenth session.

2 1981

14.5.5. 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: A study tour will be held in the USA in 1981.^{1/} Country forest and forest products profiles will be prepared by the secretariat, in collaboration with the Governments of countries concerned, and published at five- to six-yearly intervals. cont.

^{1/} Host countries to be decided for the years from 1982 to 1984 inclusive.

15. - TRADE

| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

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-ninth session, the Committee will consider the date and mandate of an ad hoc Meeting on compensation trade to be held in 1981.

cont.

15.1.2. Review of the interrelationship between
economic growth, structural and
technological change, and 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.

| | |
|-------------------------------------|----------------------------------|
| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|

Method of work: A study will be prepared by the secretariat for consideration by the Committee at its twenty-ninth session along the lines of document TRADE/R.386 and taking into account views expressed at the twenty-eighth session of the Committee.

| | |
|---|------|
| 1 | 1980 |
|---|------|

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 subregional 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 revised outline of a study will be prepared by the secretariat taking into account comments made at the twenty-eighth session of the Committee for consideration by the Committee at its twenty-ninth session.

| | |
|---|------|
| 2 | 1981 |
|---|------|

15.1.5. Review of interregional 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

| | |
|-------------------------------------|----------------------------------|
| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|

secretariat in co-operation with the secretariat of UNCTAD, of the other regional 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 commissions in order to find the ground for joint studies on interregional trade, taking into account at the same time Commission decision Q (XXXIV).

cont.

15.1.6. 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 upon the Over-all 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 K (XXXIV).

Method of work: An ad hoc Meeting on Long-Term Economic Growth and Trade Prospects will be organized jointly with the Senior Economic Advisers to ECE Governments.

1

1980

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.

| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

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.

Method of work: The line of action suggested in document TRADE/R.372 will be followed. The Executive Secretary will organize a further trial run during the first half of 1980 if informed at an early date that there is a wider and more representative participation than on previous occasions. The Executive Secretary may convene ad hoc meetings, as necessary.

cont.

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 the development of 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 (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.

| | |
|-------------------------------------|----------------------------------|
| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|

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 1981. The date and mandate of this ad hoc Meeting will be decided upon at the twenty-ninth session of the Committee.

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.

| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

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: 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. The secretariat will prepare a draft provisional agenda for this ad hoc Meeting and convene a Preparatory Meeting which will coincide with the dates of the thirty-fifth session of the Commission and which will decide on the provisional agenda for the ad hoc Meeting.

cont.

WORK AREA 15.3: THE DEVELOPMENT OF MARKED 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.

| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

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.

cont.

15.3.3. Publication and dissemination of information
to help businessmen in commercial contacts

Description: The Committee, at bi-annual 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.

cont.

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.

cont.

| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

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 secretariat will prepare a draft provisional agenda for this ad hoc Meeting and convene a Preparatory Meeting which will coincide with the dates of the thirty-fifth session of the Commission and which will decide on the provisional agenda for the ad hoc Meeting.

1

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.

1/ Obstacles to trade are dealt with in work area 2.

| | |
|-------------------------------------|----------------------------------|
| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|

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.

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.

| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

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 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

1981

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.

| | |
|-------------------------------------|----------------------------------|
| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|

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.

cont.

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.

cont.

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.

1

1980

| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

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; and the Arbitration Rules of the United Nations Economic Commission for Europe 1966. The secretariat will prepare and issue at prescribed intervals a list of the members of the Special Committee mentioned above.

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 H(XXXIV).

cont.

| | |
|-------------------------------------|----------------------------------|
| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|

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.

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 Government 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 Q (XXXIV)

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.

16. - WATER PROBLEMS

| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

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 a 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 1984/1985.

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: A second revision of the draft report will be prepared by general rapporteurs, appointed at the tenth and eleventh sessions, for submission to the eighth session of the Group of Experts on Aspects of Water Quality and Quantity for its consideration; the final report will be submitted to the twelfth session of the Committee on Water Problems.

4

1980

16.1.3 Analysis of methods of determining degree of
utilization of water resources of river basins
and of legislative and administrative action
needed at different stages of development

Description: The Committee will review the methodology of determining the degree of utilization of water resources of a river basin, including both quantitative

| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

and qualitative aspects, as a follow-up to the Seminar on Long-term Planning of Water Management at Zlatni Piasatzi (Bulgaria, 1976). 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.

Method of work: The delegation of Hungary will prepare a preliminary report on the subject matter taking into account results achieved in the implementation of the project on application of systems analysis in water resources management, for the consideration of the Group of Experts on Aspects of Water Quality and Quantity at its eighth session.

2

1981

16.1.4 International Drinking Water Supply and Sanitation Decade

Description: The Committee will make a contribution to 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.

16.1.4.1 Drinking water supply and effluent disposal systems

Description: The Committee will examine problems associated with water supply and effluent disposal systems in (i) areas with seasonal population fluctuations; (ii) low-populated areas and in (iii) densely-populated areas and, in particular, in old town centres, in order to ensure economic and safe supply of water and environmentally-acceptable means of sewage disposal and treatment.

Method of work: A seminar will be held in 1982. The programme of the Seminar will be elaborated by the Group of Experts on Aspects of Water Quality and Quantity at its ninth session.

2

1982

16.1.4.2 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,

| | Estimated duration (in years) | Estimated termination year |
|---|-------------------------------------|----------------------------------|
| 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>Method of work:</u> [To be completed by the Committee at its twelfth session] | 2 | 1983 |
| <u>16.1.5 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 (Dulgaria, 1976), 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 relating to transboundary river basins will be raised at the Meeting on International River Commissions. | 3 | 1983 |
| <u>16.1.6 Integration of long-term planning of water management to land-use planning</u> | | |
| <u>Description:</u> 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 (Bulgaria, 1976). 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. | | |
| <u>Method of work:</u> A seminar will be held in 1984. The programme of the seminar will be elaborated by the Group of Experts on Aspects of Water Quality and Quantity at its eleventh session. | 2 | 1984 |

| | |
|-------------------------------------|----------------------------------|
| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|

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 and water conservation in ECE countries through the extensive use of these economic tools.

Method of work: A seminar will be held in Veldhoven (Netherlands) from 13 to 18 October 1980. The programme of the seminar was elaborated by a preparatory meeting held in Geneva from 14 to 16 March 1979.

| | |
|---|------|
| 2 | 1980 |
|---|------|

16.2.2 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: The delegation of Canada will prepare a preliminary report for the consideration of the Committee on Water Problems at its thirteenth session.

| | |
|---|------|
| 2 | 1982 |
|---|------|

16.2.3 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 owing to water shortage.

Method of work: [To be completed by the Committee at its twelfth session]

| | |
|---|------|
| 2 | 1983 |
|---|------|

| | |
|-------------------------------------|----------------------------------|
| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|

16.2.4 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 twelfth session]

3

1984

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 and method of work: [to be completed at the twelfth session of the Committee on Water Problems.]

16.3.1.2 Compilation of existing conventions and international agreements concerning water resources in the ECE region

Description: The Committee will undertake the compilation of existing conventions and international agreements in the ECE region 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.

| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

Method of work: Details are given under each element below.

cont.

(a) A rapporteur from Austria will prepare a draft report relating to the subject matter, for consideration by the Committee at its twelfth session. This report will present, inter alia, the general trends and common elements of the different agreements in force, with the goal of providing guidelines for formulating future international agreements concerning water resources.

(b) The secretariat will periodically up-date (on a four-year basis) the synoptic list of existing conventions and international agreements concerning water resources in the ECE region. This work will be carried out on the basis of relevant information provided by Governments.

16.3.1.3 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 twelfth session]

3

1983

16.3.2 Protection of the marine environment from pollutants emanating from land-based sources

Description: As a follow-up to the seminar on the protection of coastal waters against pollution from land-based sources, held in Lisbon, Portugal, 1975, the Committee will further consider the protection of the marine environment from pollutants emanating from land-based sources situated in ECE countries in order to promote international co-operation in this particular field.

Method of work: Details are given under each project component below.

cont.

| | |
|-------------------------------------|----------------------------------|
| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|

16.3.2.1 Economic assessment of damages caused
to the marine environment by pollution
emanating from land-based sources

Description: The Committee, in co-operation with the Senior Advisers on Environmental Problems, will examine possible ways to assess the economic damages caused to the marine environment by pollutants emanating from land-based sources.

Method of work: The Committee at its twelfth session will consider means of undertaking such an activity in the light of the results of the Seminar on Environmental Impact Assessment held, under the auspices of the Senior Advisers on Environmental Problems, in September 1979.

| | |
|---|------|
| 2 | 1982 |
|---|------|

16.3.2.2 Substances emanating from land-based sources
harmful to the marine environment

Description: The Committee will undertake a compilation of substances harmful to the marine environment enumerated in various Conventions related to marine pollution from land-based sources. Special emphasis will be given to different policies for pollution control in these Conventions.

Method of work: [To be completed by the Committee at its twelfth session].

| | |
|---|------|
| 2 | 1984 |
|---|------|

16.3.3 Comparison and analysis of methods for
defining standards of water quality

Description: 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.

Method of work: The Committee entrusted, at its tenth session, 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, paragraphs (b), (c) and (d) of document WATER/R.59. A report prepared by the task force will be submitted to the twelfth session of the Committee on Water Problems

| | |
|---|------|
| 3 | 1980 |
|---|------|

| | |
|-------------------------------------|----------------------------------|
| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|

16.3.4 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 twelfth session]

2

1982

16.3.5 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: The delegation from France will prepare a preliminary report taking into account possible recommendations of the High-level Meeting within the Framework of the ECE on the Protection of the Environment for the consideration of the Committee on Water Problems at its thirteenth session.

2

1982

16.3.6 Methods for assessing the economic impact caused by water pollution

Description: The Committee will consider methods used in different countries for assessing the economic impact of water pollution in order to provide ECE Governments with information on the methods and criteria existing in the region.

Method of work: Details are given under each project component.

| | Estimated duration (in years) | Estimated termination year |
|---|-------------------------------------|----------------------------------|
| 16.3.6.1 Methods for assessing the economic impact caused by water pollution due to activities related to recreation and amenities | | |
| <u>Description:</u> 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. | | |
| <u>Method of work:</u> [To be completed by the Committee at its twelfth session.] | 2 | 1983 |
| 16.3.6.2 Methods of assessing the economic impact caused by water pollution due to industrial and urban activities | | |
| <u>Description:</u> The Committee will consider methods used in different countries for assessing the economic impact of water pollution due to industrial and urban activities, in order to provide ECE Governments with information on the methods and criteria existing in the region. | | |
| <u>Method of work:</u> [To be completed by the Committee at its twelfth session.] | 2 | 1984 |
| 16.3.7 <u>Setting up and operating of water quality and pollution sources monitoring devices with special regard to automatic alarm systems</u> | | |
| <u>Description:</u> 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. | | |
| <u>Method of work:</u> [To be completed by the Committee at its twelfth session]. | 3 | 1985 |

| Estimated duration (in years) | Estimated termination year |
|-------------------------------------|----------------------------------|
|-------------------------------------|----------------------------------|

WORK AREA 16.4: RESEARCH AND DEVELOPMENT

16.4.1 Techniques and means for industrial and municipal sewage effluent purification

Description: 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.

Method of work: On the basis of a draft prepared by the secretariat, the Group of Experts on Aspects of Water Quality and Quantity at its eighth session will elaborate a questionnaire for circulation to ECE Governments. Country monographs, as replies to the questionnaire will be used by rapporteurs in the preparation of the report for consideration by the Committee at its thirteenth session.

2

1981

16.4.2 Water pollution from animal production

Description: 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.

Method of work: The Committee will organize a seminar in 1981 on this subject jointly with the Committee on Agricultural Problems. The programme of the seminar will be elaborated by the Group of Experts on Aspects of Water Quality and Quantity at its eighth session on the basis of information provided by Governments regarding inter alia the list of topics for discussion and the nomination of rapporteurs.

2

1981

16.4.3 Creation of water supply systems with zero waste water discharge in industrial enterprises

Description: The Committee will consider technical, economic, ecological, social and hygienic aspects related to the creation of water supply systems with zero waste water discharge in industrial enterprises with a view to elaborating recommendations and guidelines directed to the establishment of criteria and principles for selecting the most advanced effective and economic water supply schemes with zero waste water discharge.

Method of work: [To be completed by the Committee at its twelfth session.]

2

1982

| <u>Estimated duration (in years)</u> | <u>Estimated termination year</u> |
|--|---|
|--|---|

16.4.4 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. The programme of the seminar will be elaborated by the Group of Experts on Aspects of Water Quality and Quantity at its tenth session.

2

1983

16.4.5 Use of treated domestic sewage

Description: The Committee will review present practices for the use of treated domestic sewage for other purposes (e.g. recharging aquifers, irrigation, cooling waters, etc.) in order to establish guidelines and promote joint research among ECE Governments for a more rational use of available water resources.

Method of work: A seminar will be held in 1985. The programme of the seminar will be elaborated by the Group of Experts on Aspects of Water Quality and Quantity at its twelfth session.

2

1985