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CONTENTS

VOLUME I

	<u>paragraphs</u>	<u>page</u>
INTRODUCTION	1	
PART I MATTERS THAT REQUIRE ACTION BY, OR ARE BROUGHT TO THE ATTENTION OF, THE ECONOMIC AND SOCIAL COUNCIL	2	
PART II WORK OF THE COMMISSION SINCE THE THIRTY-FIRST SESSION		
A. Activities of subsidiary bodies	3	
B. Other activities	4-5	
C. Co-operation with other international organizations	6	
PART III THIRTY-SECOND SESSION OF THE COMMISSION		
A. Attendance and organization of work	7-19	
B. Agenda	20	
C. Account of proceedings	21-361	
Review of the economic situation in Europe	21-28	
Work of the Commission as a whole, and The future activities of the Commission	29-59	
The future activities of the Commission and the implementation of the Final Act of the CSCE	61-62	
Encouragement of economic co-operation in the Mediterranean in the light of the Final Act of the CSCE	63-65	
The proposal in regard to the holding of all-European congresses on questions of co-operation in the field of protection of the environment, development of transport, and energy	66-69	
Selected topics for special attention	70-74	
Concentration and integration of Commission's programmes of work	75-101	
Work of the Principal Subsidiary Bodies of the Commission	102-264	
Committee on Agricultural Problems	103-114	
Chemical Industry Committee	115-125	

CONTENTS (continued)

	<u>paragraphs</u>	<u>page</u>
Coal Committee	126-136	
Conference of European Statisticians	137-147	
Committee on Electric Power	148-156	
Committee on Gas	157-163	
Committee on Housing, Building and Planning	164-172	
Inland Transport Committee	173-181	
Senior Advisers to ECE Governments on Environmental Problems	182-192	
Senior Advisers to ECE Governments on Science and and Technology	193-201	
Senior Economic Advisers to ECE Governments	202-218	
Steel Committee	219-229	
Timber Committee	230-249	
Committee on the Development of Trade	250; 265-278	
Committee on Water Problems	251-264	
Follow-up action on the relevant Commission resolutions and decisions		
Development of trade	250; 265-278	
Industrial co-operation	279-288	
Energy problems	289-300	
Standardization	301-308	
Automation	309-316	
Engineering industries	317-331	
Presentation of programme category Ol. of the Commission's programme of work	332-335	
Recommendations by the Sessional Committee and action taken thereon by the Plenary	336-344	
Programme of work for 1977-1981	345-354	
Other business	355-360	
Adoption of the Annual Report of the Commission to the Economic and Social Council	361	

PART IV RESOLUTION AND OTHER DECISIONS ADOPTED BY THE
THIRTY-SECOND SESSION OF THE COMMISSION

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CONTENTS (continued)

ANNEXES

- I. List of meetings of the Commission's subsidiary bodies held in 1976/77
- II. List of additional financial implications brought to the attention of the thirty-second session of the Commission in connexion with the adoption of the programme of work and priorities
- III. List of major ECE studies and publications 1976/77

VOLUME II

PART V PROGRAMME OF WORK FOR 1977-1981

PART V

PROGRAMME OF WORK FOR 1977-1981

Introduction */

1. General

The Commission's programme of work for 1977-1981, as considered and approved at the thirty-second session of the Commission, 1/ is reproduced in this part of the Commission's Report to the Economic and Social Council.

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

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

2. Programme changes

The analytical comparison of changes between the previous and the new programme of work - pursuant to operative paragraph 11 of Council resolution 1367 (XLV) - could not be prepared this year in view of basic differences in the format and presentation resulting from the implementation of Commission resolution 1 (XXXI).

*/ Editorial note: The Executive Secretary has made certain adjustments in the numbering of programme category 01. as requested by the Commission (see Part III, paragraph 334).

1/ See above, paragraphs 345 to 354 and Commission resolution 1 (XXXII).

01(A) - POLICY AND CO-ORDINATION

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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WORK AREA 01(A).1: ACTIVITIES OF THE COMMISSION AS A WHOLE AND
PROGRAMMES OF WORK AND PRIORITIES

01(A).1.1. Review and guidance of the activities of the
Commission as a whole: evaluation, co-ordination
and formulation of programmes of work

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

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

cont.

01(A).1.2. The work and future activities of the Commission

Description: At its thirty-second session the Commission adopted its resolution 1 (XXII)

I. In section I of this resolution it:

(a) called upon the Governments of member countries to continue to take full advantage of the potential of the ECE as an instrument for developing their multilateral co-operation;

(b) reaffirmed the determination of member Governments to implement, within the framework of the competence of the Commission, the pertinent provisions of the Final Act of

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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the CSCE calling for multilateral implementation, making appropriate adaptations to the Commission's programme of work, seeking further to improve the efficiency and effectiveness of its activities, and considering whether adaptations to its structure and working methods are desirable to this end;

(c) welcomed the constructive report prepared by the Executive Secretary on the future activities of the Commission and the implementation of the Final Act of the CSCE and took note of the report which he had prepared in accordance with decision D (XXI);

(d) requested the Executive Secretary to transmit the present resolution, together with document E/ECE/911, and the views expressed or agreed in relation thereto by member Governments at the thirty-second session to the Principal Subsidiary Bodies of the Commission for their guidance;

(e) approved its programme of work for 1977-78 and endorsed in principle, subject to review at its thirty-third session, its long-term programme of work for 1978-1981;

(f) requested its subsidiary bodies, as well as the Executive Secretary, to take into account in their work and when reviewing their respective short- and long-term programmes this resolution, the decisions of the Commission, and the points raised by delegations and reported in the relevant passages of the summary records and the report of the thirty-second session;

(g) requested its subsidiary bodies also to take into account when reviewing their programmes the provision of the Final Act dealing with the interests of countries which are developing from an economic point of view; and

(h) reaffirmed its wish that the Principal Subsidiary Bodies should continue to pay special attention to the topics in the Final Act requiring multilateral implementation and referred to in the section entitled "Co-operation in the field of economics, of science and technology and of the Environment", as is provided for in decision D (XXI); and asked the Executive Secretary to prepare a report to the thirty-third session on progress in these areas.

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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II. In section II of this resolution, the Commission:

- (a) invited the Executive Secretary, in consultation with member Governments and with the assistance of the Senior Advisers to ECE Governments on Environmental Problems, to carry out a detailed analysis of topics which, in the light of the views of member Governments, may be appropriate for consideration at a high-level meeting within the framework of the ECE on the protection of the environment;
- (b) requested the Executive Secretary to present to the thirty-third session of the Commission for its consideration and decision a report on the analysis mentioned above as well as one on the modalities of organizing such a high-level meeting and on the procedural and organizational issues related thereto;
- (c) agreed that with a view to taking a decision the Commission will consider constructively at its thirty-third session, in the light of the Executive Secretary's reports and against the criteria set out earlier in this resolution, the holding as soon as practicable of such a high-level meeting;
- (d) drew to the attention of member Governments the discussion at the thirty-second session of the Commission on the Soviet Government's proposal for the holding of all-European congresses in the fields of transport and energy, and recalled the suggestion in decision B(XXXI) that member Governments should study the proposal thoroughly in the light of discussion in the Commission and the relevant provisions of the Final Act of the CSCE; and
- (e) asked the Executive Secretary to circulate such views in regard to the proposal as member Governments may wish to communicate to him.

III. In section III of this resolution the Commission invited the Executive Secretary to inform the meeting [at the level of representatives appointed by Ministers of Foreign Affairs] in Belgrade, if invited to do so by the participating States, of the progress made in the ECE on the implementation of the pertinent 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.

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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01(A).1.3. Economic co-operation in the Mediterranean in
the light of the Final Act of the CSCE

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

- (a) noted the report of the Executive Secretary, pursuant to decision A (XXXI), on the encouragement of economic co-operation in the Mediterranean in the light of the Final Act of the CSCE;
- (b) noted with satisfaction the positive responses of the ECA and the ECWA, as well as other international organizations and specialized agencies; and requested the Executive Secretary to continue the work in this field, and to submit to the Commission conclusions thereon in the report mentioned in paragraph (f) below;
- (c) recommended that its Principal Subsidiary Bodies should pay due regard to projects and activities of interest to the Mediterranean countries of the ECE region;
- (d) requested the Executive Secretary to transmit ECE documentation of interest and relevance directly to all Mediterranean countries non members of the Commission;
- (e) agreed that, in carrying out the provisions of this decision, and in exercise of the Commission's prerogatives under paragraph 11 of the terms of reference, all Mediterranean states non members of the ECE shall be invited to participate in accordance with that paragraph of the terms of reference; and
- (f) requested the Executive Secretary to prepare for the thirty-third session a report on the implementation of this decision.

01(A).1.4. Selected topics for special attention

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

- (a) agreed that special attention should be accorded to [transboundary air pollution] problems in all relevant aspects of the work of the Commission during the coming year; and

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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(b) requested the Executive Secretary, consulting member States through an appropriate ad hoc machinery within the ECE, to prepare specific proposals for measures designed to lead to the solution of transboundary air pollution problems in the region, such as the harmonization of emission control policies; and to report accordingly to the thirty-third session of the Commission.

01(A).1.5. Concentration and integration of the Commission's programmes of work

Description: At its thirty-second session the Commission adopted its decision D (XXXII) in which it requested the Executive Secretary to submit to the member Governments well ahead of the thirty-third session, a report on the activities in the field of trade from the point of view of concentration, integration and co-ordination, to be further discussed at that session, taking into account the comments made by the Committee on the Development of Trade.

01(A).1.6. Problems of land use and land-use planning in the ECE region

Description: At its thirty-second session the Commission adopted its decision E (XXXII) in which it:

(a) requested the Executive Secretary in consultation with member Governments to consider convening, before the thirty-third session, an ad hoc consultative meeting of governmental experts representing relevant disciplines to undertake, in co-operation with other international organizations concerned, the following tasks:

- (i) to identify the problem areas in land use and land-use planning requiring international co-operation; and
- (ii) to make proposals and recommendations so that these problems are fully taken into consideration in the overall ECE activities;

(b) asked the Executive Secretary to bring this decision to the attention of the Principal Subsidiary Bodies concerned, which meet prior to the ad hoc meeting and to invite them to make their contributions; and

(c) invited the Executive Secretary to present to the thirty-third session a report on the implementation of this decision.

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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01(A).1.7. Dissemination of information

Description: At its thirty-second session, the Commission adopted its decision F (XXXII) in which it requested its competent subsidiary bodies to systematically examine their studies and reports with an aim to releasing as many of them as possible when completed to the public domain.

WORK AREA 01(A).2: ECONOMIC DEVELOPMENTS, PROBLEMS AND PROSPECTS IN THE ECE REGION

01(A).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(A).2.2. The overall economic perspective for the ECE region up to 1990

Description: At its thirty-second session the Commission adopted its decision G (XXXII) in which it:

(a) took note with appreciation of the work accomplished so far by the Senior Economic Advisers in the elaboration of the Overall Economic Perspective;

(b) further noted that the main purposes of the study on the Overall Economic Perspective for the ECE region up to 1990 were:

- to provide ECE Governments and Principal Subsidiary Bodies of the Commission with overall economic views on the development of the region in the context of the world economy; and
- to identify long-term economic problems of common interest thus allowing member States to more easily visualize future new areas for mutually beneficial co-operation especially between member countries with different social and economic systems;

Estimated duration (in years)	Estimated termination year
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(c) endorsed the plans made by the Senior Economic Advisers at their fourteenth session to pursue their work on the Overall Economic Perspective, and in particular their readiness to engage in a constructive co-operation with the other Principal Subsidiary Bodies concerned in revising the interim version of the Overall Economic Perspective;

(d) invited the Senior Economic Advisers to bear in mind in their future work on the Overall Economic Perspective the specific problems of member countries of the Commission which are developing from an economic point of view;

(e) requested the other Principal Subsidiary Bodies in the spirit of dialogue to make their contribution, in the area of their competence, to the work done so far in the study on the OEP so that their comments could fully be taken into account in further versions of the OEP;

(f) approved the inclusion in the programme of work of the Senior Economic Advisers of plans to undertake regularly the elaboration of sliding long-term economic perspectives, preferably every five years; and

(g) requested the Executive Secretary to prepare for the thirty-third session of the Commission an interim report on the examination of long-term trends in the economic development of the region, taking into account the work on the OEP.

WORK AREA 01(A).3: CO-OPERATION WITH OTHER UNITED NATIONS PROGRAMMES AND BODIES

01(A).3.1. Review of Commission activities in support of other United Nations programmes and in co-operation with other United Nations bodies

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

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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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(A).3.2. The contribution of the Commission to the preparations for the United Nations Conference on Science and Technology for Development

Description: At its thirty-second session the Commission adopted its decision A(XXXII) in which it:

- (a) decided to co-operate fully and actively in [the] preparations in order to ensure the success of the United Nations Conference on Science and Technology for Development;
- (b) invited the Executive Secretary to co-operate closely with the competent organs of the United Nations system in the preparations for the Conference while at the same time ensuring co-ordination at the regional level;
- (c) requested the Senior Advisers to ECE Governments on Science and Technology, as well as its other subsidiary bodies, to pay particular attention in their programmes of work to projects related to the aims of the Conference;
- (d) decided that the regional meeting of the ECE shall take place in Bucharest in June/July 1978 with a view to elaborating the regional documents for presentation to the United Nations Conference on Science and Technology for Development;
- (e) invited member countries to contribute fully to the success of the ECE regional meeting; and
- (f) requested the Executive Secretary to report to the thirty-third session of the Commission on the implementation of this decision.

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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WORK AREA 01(A).4: CO-OPERATION WITH OTHER INTERNATIONAL ORGANIZATIONS

01(A).4.1. Review of Commission activities involving co-operation with other international organizations

Description: At its annual sessions the Commissions 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(B) - ENGINEERING INDUSTRIES

At its thirty-second session the Commission adopted its decision K(XXXII) in which it decided:

- (a) to take note of the Executive Secretary's report E/ECE/925;
- (b) to adopt the programme of work based on the proposals by the fifth ad hoc Meeting of Experts on Engineering Industries (ECE/ENGIN/7, Annex II) as amended by the thirty-second session of the Commission (see below);
- (c) to convene prior to the thirty-third session of the Commission the sixth ad hoc Meeting of Experts on Engineering Industries:
 - (i) to review in the light of the views expressed by delegates and the decisions taken by the Commission at its thirty-second session the programme of work in the field of engineering industries;
 - (ii) to make suggestions to the Commission on the most suitable methods of work for the implementation of the programme of work;
- (d) to convene prior to the thirty-third session of the Commission the preparatory meeting for a seminar on technical trends in the development of airborne equipment for agriculture and other selected areas of the national economy, to be held in Poland in 1978;
- (e) to hold a Seminar on Problems of Engineering Equipment for Foundries and the Introduction of Advanced Methods of Production of Such Equipment, in Geneva in 1977; and

(f) to request the Executive Secretary to report to the Commission at its thirty-third session on the implementation of this decision.

* * *

THE COMMISSION'S PROGRAMME OF WORK FOR THE AD HOC MEETINGS OF EXPERTS
IN THE FIELD OF ENGINEERING INDUSTRIES

I. Projects scheduled for 1977-1978

WORK AREA 01(B).1: MEDIUM- AND LONG-TERM PERSPECTIVES

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

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

Methods of work: The project will be implemented through a series of studies on selected problems of the engineering industries prepared by the secretariat with the help of Government Rapporteurs at intervals to be determined. On the basis of the study on "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 sectors will be selected for consideration at a later stage.

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

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

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

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

01(B).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 interest and possibilities for their solution, starting by the up-dating to 1975 of the ECE study "Role and Place of Engineering Industries in National and World Economies".

Methods of work: Studies on selected subjects will be prepared by the secretariat with the help of Government Rapporteurs at intervals to be determined. As a first step, the secretariat was entrusted with the task of up-dating the study in question and presenting the draft to the next ad hoc Meeting of Experts on Engineering Industries. Several delegations were in favour of including also medium-term prospects in this up-dating of the above-mentioned study.

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

01(B).3.1. Problems of engineering equipment for foundries and the introduction of advanced methods of production of such equipment

Description: Bearing in mind the difficult working conditions in foundries, the ad hoc Meetings of Experts on Engineering Industries will provide a forum for the exchange of views and experience on the techno-economic prospects and developments in the production and introduction of engineering equipment for foundries, with a view to determining the most economic ways of introducing the advanced technologies concerned.

Methods of work: In the light of recommendations made by the Fourth and Fifth ad hoc Meetings of Experts on Engineering Industries, a seminar will be organized on this topic in Geneva.

01(B).3.2. Precision instruments

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

Methods of work: As the first step the secretariat will circulate material received from ECE member countries and the scope of a seminar and/or a study will be defined at the next ad hoc Meeting of Experts on Engineering Industries.

01(B).3.3. Technical trends in the development of airborne equipment for agriculture and other selected areas of the national economy

Description: Economic and technical aspects will be considered at a seminar and experiences on new trends exchanged.

Methods of work: Following the invitation of the Polish Government a seminar will be held in Poland in 1978. A preparatory meeting will be convened in due course.

01(B).3.4. Present situation and future trends in the use of electro-mechanical handling equipment in engineering industries

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

Methods of work: A preparatory meeting for the Seminar on the Present Situation and Future Trends in the Use of Electro-mechanical Handling Equipment in Engineering Industries, to be held in Bulgaria in 1979, should be convened in 1978.

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

01(B).4.1. Production of engineering equipment for preventing pollution and the technical and economic efficiency of such equipment

Description: The ad hoc Meeting of Government Experts on the Production of Engineering Equipment for Preventing Pollution for this study will analyse present and future trends in the production of engineering equipment for preventing pollution. Methods of measuring pollution in certain industrial sectors will be studied and national legislation concerning anti-pollution measures relating to engineering equipment will be examined. It is expected that exchange of experience and information will lead to better identification of these problems and help ECE member Governments seek appropriate solutions.

Methods of work: The study will be finalized by the end of 1977 and will be brought to the attention of the Senior Advisers to ECE Governments on Environmental Problems.

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

01(B).5.1. Preparation of statistics

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

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

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

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

Methods of work: The secretariat will collect the required information from governments and publish it in an annual bulletin. When required, joint meetings will be organized.

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.

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

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

Methods of work: The secretariat was entrusted with the preparation of a draft bulletin of imports of engineering products and a preliminary 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(B).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: Through ad hoc Meetings on Engineering Statistics, jointly with the Conference of European Statisticians, statistical problems will be approached. As a first step, the secretariat was entrusted with the elaboration of a list of statistical problems concerning engineering industries to be presented to the next ad hoc Meeting of Experts on Engineering Industries.

II. List of projects of special interest for possible action at a date to be decided

SELECTED ECONOMIC AND TECHNOLOGICAL PROBLEMS

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

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

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

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

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

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

(c) Measures for saving raw materials (especially application of metal and non-metal materials, etc.) in engineering industries

Description: The ad hoc Meetings of Experts on Engineering Industries will study the most economical ways of using raw materials 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: Studies will be prepared by the secretariat with the help of Government Rapporteurs or, whenever appropriate, through convening seminars on their specific aspects. A preparatory meeting should be convened in due course.

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

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

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

INDUSTRIAL CO-OPERATION 1/

- (e) Problems linked with the agreements on specialization and joint production arrangements in individual branches of engineering industries

Description: The ad hoc Meetings of Experts on Engineering Industries will identify problems inherent in modern production arrangements of the engineering industries in order to promote their better understanding and to seek appropriate solutions. The analysis of selected branches and their inter-relationships will provide background material for decision-making by governments based on an efficient specialization policy.

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

- (f) National and international practice in licensing and the transfer of technology in the field of engineering industries

Description: The ad hoc Meetings of Experts on Engineering Industries will promote the gathering of general information covering the transfer of technology in selected branches of engineering industries.

Methods of work: Relevant information will be collected with the help of Government Rapporteurs and in co-operation with the Committee on the Development of Trade, the Senior Advisers to ECE Governments on Science and Technology and the Conference of European Statisticians.

01(c). - GENERAL ENERGY PROBLEMS

At its thirty-second session the Commission adopted its decision H(XXXII), as follows:

The Economic Commission for Europe,

Having considered its future activities in the field of general energy problems in the ECE region:

A. PROGRAMME OF WORK

1. Decided to adopt the programme of work on general energy problems contained in Annex II to E/ECE/921 (see below).

B. MEDIUM AND LONG-TERM PERSPECTIVES

1. (a) Invited the Executive Secretary to prepare, on the basis of existing material, a study on new issues affecting the energy economy of the ECE region in the medium and long term;

1/ When implementing projects included in this field, due care would be taken to avoid any unnecessary duplication of work and to arrange, as appropriate, co-operation with the Committee on the Development of Trade.

- (b) Requested the Executive Secretary to circulate a questionnaire to member Governments requesting views on the subject matter of this study;
- (c) Requested the Executive Secretary to convene as soon as possible an ad hoc meeting of experts for the discussion of the scope and structure of the new study as well as the questionnaire referred to above.

C. ENERGY ECONOMY AND EFFICIENCY

1. Agreed to pursue activities on the following subjects:

- (a) consideration of up-dated national studies analysing the progress made towards the achievement of greater energy economy and efficiency;
- (b) review and evaluation of work done or planned within ECE relating to energy economy and efficiency;
- (c) exchange of experience and views on problems related to the rational utilization of secondary forms of energy generated by industrial complexes, and on the reduction of specific energy consumption for various industrial products;
- (d) exchange of information and views on techniques and results of public awareness and public action programmes.

2. Invited member Governments to transmit to the secretariat:

- (a) up-dated national studies analysing the progress made towards the achievement of greater energy economy and efficiency (prior to 15 October 1977);
- (b) reports on and an evaluation of public awareness and public action programmes in the field of energy conservation (prior to 15 October 1977);
- (c) written comments on the study "Methods of increasing the recovery of liquid and gaseous hydrocarbons from underground deposits" (ECE/AC.3/R.4) to be taken into account in preparations for the seminar to be convened under 3 (c) below (prior to 1 April 1978).

3. Requested the Executive Secretary to convene preparatory meetings for the following seminars:

- (a) combined production of electric power and heat (preparatory meeting: September 1977; Seminar: autumn 1978);
- (b) econometric models, input-output and cost-benefit analysis for assessing the potential of energy conservation and for optimizing conservation programmes (preparatory meeting: early 1978; Seminar: 1979); (an exchange of views on methodological questions should take place at the preparatory meeting and note ECE/AC.3/R.1/Add.1 should be taken into account);

- (c) improved techniques for the extraction and processing of primary forms of energy (preparatory meeting: autumn 1978; Seminar 1979/1980).

4. Noted that:

- (a) energy conservation aspects of coal gasification and liquefaction will be dealt with at the Coal Committee Symposium on gasification and liquefaction of coal (Poland, 1979);
- (b) preparations are well advanced for the Seminar on the impact of energy considerations on the planning and development of human settlements to be held under the auspices of the Committee on Housing, Building and Planning at Ottawa (Canada) from 3-14 October 1977;
- (c) the Senior Advisers to ECE Governments on Environmental Problems, the Chemical Industry Committee and the Steel Committee are presently examining problems relating to recycling of energy-intensive industrial wastes and by-products, as well as on the use of municipal wastes.

5. Requested its Principal Subsidiary Bodies concerned to give special attention to:

- (a) ways of intensifying co-operation within the ECE framework with respect to energy conservation;
- (b) standards of specific energy consumption and means of lowering them in various sectors;
- (c) rational utilization of secondary forms of energy;
- (d) the relationship between energy conservation and structural changes of the economy, taking into account results of econometric models, cost-benefit and input-output analysis;
- (e) non-conventional recoverable energy sources, particularly solar energy, and small-scale (employment-intensive) energy technologies;
- (f) the study on "Methods of increasing the recovery of liquid and gaseous hydrocarbons from underground deposits" (ECE/AC.3/R.4) as part of the preparations for the seminar to be convened under 3 (c) above.

6. Requested the Executive Secretary to prepare a report containing a review and an evaluation of work done or planned in ECE relating to energy economy and efficiency for consideration at the ad hoc meeting of experts referred to in section D below; and

7. Requested the Executive Secretary to consider the practical aspects of the preparation of a monograph on present problems in the field of energy conservation.

D. Requested the Executive Secretary to convene, prior to the thirty-third session in early 1978, an ad hoc meeting of experts to consider the following:

1. New issues affecting the energy economy of the ECE region in the medium and long-term taking into account a preliminary version of the study and replies to the questionnaire referred to in section B of this decision; and
2. Problems of energy economy and efficiency as contained in section C, paragraph 1 of this decision.

E. Requested the Executive Secretary to report to the thirty-third session of the Commission on the implementation of this decision.

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

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

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

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

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

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

Description: This review will be undertaken by the Commission at its annual sessions. Pursuant to Commission decision E(XXIX) the Principal Subsidiary

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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Bodies will continue to pay attention to the relevant aspects of energy problems which are within their areas of responsibility and within the framework, and on the basis, of their programmes of work and plans.

Method of work: The Commission will make this review on the basis of the relevant parts of the reports submitted to it by the Principal Subsidiary Bodies on their annual sessions as well as on the basis of relevant secretariat studies.

cont.

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

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

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

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

cont.

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

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

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

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

(c) long-term energy consumption perspectives and scenarios in the light of energy conservation programmes (Senior Economic Advisers to ECE Governments);

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

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

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

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

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

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

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

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

(a) combined production of electric power and heat;

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

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duration
(in years) | Estimated
termination
year |
|---|-------------------------------------|----------------------------------|
| (c) techniques and results of "public awareness" and "public action" programmes; | | |
| (d) recycling of energy-intensive industrial wastes and by-products as well as the use of municipal wastes for energy production; | | |
| (e) improved techniques for extraction and processing of primary forms of energy; | | |
| (f) improved insulation of houses and buildings. | | |

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

cont.

A seminar on combined production of electric power and heat will be held in the autumn of 1978; the programme and preparations for this seminar will be considered at the March 1977 ad hoc Meeting on Energy Economy and Efficiency in the ECE Region.

2 1978

Seminars on conservation aspects of the development and application of new techniques for the transformation of primary energy will be held. The conservation aspects of coal gasification and liquefaction will be dealt with at the Symposium on the Gasification and Liquefaction of Coal to be held in 1978 or 1979 (see also project 04.3.5.1.(b)).

2 1978 or
1979

The topic of improved insulation of houses and buildings will be included in the programme of the Seminar on Energy in Human Settlements to be held in Ottawa (Canada) in October 1977. (See also project 08.1.6.)

1 1977

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

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

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

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

cont.

Estimated duration (in years)	Estimated termination year
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01(C).4.2. Bulletin of General Energy Statistics for Europe

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

Method of work: Taking into account the results of the work of the Conference of European Statisticians on the elaboration of a system of general energy statistics serving as a framework for the development and harmonization of statistics on energy needed for national and international purposes (see project 12.3.7.2), this Bulletin will be prepared by the secretariat and issued annually.

cont.

01(D) - STANDARDIZATION

At its thirty-second session the Commission adopted its decision I (XXXII) in which it decided:

- (a) to take note of the report of the Executive Secretary on the activities of the Commission in the field of standardization (E/ECE/923) and the report of the Fourth Meeting of Government Officials Responsible for Standardization Policies (ECE/STAND/16);
- (b) to take a decision, having in mind the increasingly important role of international standardization and certification in the future activities of the Commission, to convene meetings at intervals of one-and-a-half years;
- (c) to convene a Meeting of Government Officials Responsible for Standardization Policies in 1978;
- (d) to convene a Group of Experts on Standardization Policies to prepare that Meeting and to consider the matters referred to it by the Fourth Meeting; and
- (e) to request the Executive Secretary to report to the thirty-third session of the Commission on the implementation of this decision.

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	Estimated duration (in years)	Estimated termination year
<u>WORK AREA 01(D).1: INTERNATIONAL HARMONIZATION OF STANDARDS AND CO-OPERATION IN THE FIELD OF CERTIFICATION</u>		
<u>01(D).1.1. International and national developments and prospects</u>		
<u>Description:</u> Regular review and analysis of recent developments and prospects related to standardization and certification policies pursued by ECE Governments, by international standardizing bodies and by standards organizations.		
<u>Method of work:</u> Regular meetings of Government Officials Responsible for Standardization Policies, and inter- sessional work of the Group of Experts on Standardization Policies.		
	cont.	
<u>01(D).1.2. Harmonization of standards</u>		
<u>Description:</u> Identification of concepts and problems.		
<u>Method of work:</u> Consideration by meetings of Government Officials and their Group of Experts on the basis of a document transmitted by the Government of the USSR (STAND/R.19/Add.2).		
	2	1978
<u>01(D).1.3. Identification of sectors which are of interest to ECE Governments with a view to a programme of work for international standardization</u>		
<u>Description:</u> Review of a list of product sectors identified as having standards interest and of the criteria on which the list is compiled.		
<u>Method of work:</u> Consultations on the basis of contributions by governments and international standardizing bodies and standards organizations at meetings of Government Officials and their Group of Experts.		
	cont.	

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

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

Method of work: A report will be prepared by the secretariat for consideration by the Group of Experts.

1	1977
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01(D).1.5. Preparation and implementation of
recommendations

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

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

cont.

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

Description: Consideration will be given to the possibilities of developing methods of measuring the economic impact of standardization and certification on international trade in selected sectors.

Method of work: Co-operation with ECE subsidiary bodies and other international organizations to identify sectors.

2	1978
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WORK AREA 01(D).2: CERTIFICATION

01(D).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.

Estimated duration (in years)	Estimated termination year
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01(D).2.2. Guidelines for certification

Description: Study of the concepts underlying international certification arrangements and review of the draft guidelines (STAND/R.15, Annex I, Sec. F).

Method of work: Discussions at meetings of the Group of Experts with a view to presenting revised guidelines to the next meeting of Government Officials.

2	1978
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01(E). - AUTOMATION

At its thirty-second session the Commission adopted its decision J (XXXII) in which it decided:

- (a) to take note of the Executive Secretary's report E/ECE/924 and Add.1 on the progress made during 1976/77 in the activities of the Working Party on Automation;
- (b) to approve the Working Party's programme of work for 1977-1981, as contained in Annex I to ECE/AUTOMAT/6 (see below);
- (c) to consider the holding of sessions of the Working Party annually instead of every two years, provided that the total length of automation meetings did not exceed the number of days so far allocated, and the convening of ad hoc meetings of experts only when special expertise was required; and
- (d) to request the Executive Secretary to report to the Commission at its thirty-third session on the implementation of this decision.

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Estimated duration (in years)	Estimated termination year
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WORK AREA 01(E).1: MEDIUM- AND LONG-TERM PERSPECTIVES

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

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

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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Method of work: The secretariat will undertake, with the assistance of governmental 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 technico-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	1979
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01(E).1.2. Technological perspectives in automation

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

Method of work: Governments will submit to the secretariat biennially a general analysis of developments and applications concerning automation equipment. Taking this material as a basis, the secretariat will prepare a general review of developments in automation technology in the countries of the ECE region.

cont.

WORK AREA 01(E).2: CURRENT DEVELOPMENTS AND PROSPECTS,
INCLUDING INTERNATIONAL TRADE

01(E).2.1. Review of trends in automation, including
international trade

Description: The Working Party will analyse the statistics of production, consumption and trade in automation equipment and will attempt to pinpoint the structural or cyclical trends in the industries manufacturing automated equipment.

Method of work: On the basis of statistics which it will collect by a method to be defined under project 01(E).5.1, the secretariat will prepare sets of indices biennially with regard to automation equipment production and consumption and will map out the main international trade flows, giving short-term forecasts.

cont.

Estimated duration (in years)	Estimated termination year
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01(E).2.2. Automation of assembly processes in the engineering industry

The description and method of work of this topic will be defined at the next session of the Working Party on the basis of information received from the different countries in this field. To this effect a circular letter and questionnaire will be prepared by the secretariat.

2	1981
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WORK AREA 01(E).3: SELECTED ECONOMIC AND TECHNOLOGICAL PROBLEMS

01(E).3.1. Review of research efforts on automation

Description: The Working Party will consider the main lines of research and the resources employed by public authorities to promote the development of automation in accordance with specific economic objectives.

Method of work: Governments will submit biennially a review of the resources which their respective countries employ or propose to employ on automation development, and the secretariat will prepare a consolidated report on the basis of those submissions.

cont.

01(E).3.2. Economic criteria used for assessing the efficiency of computer-aided manufacturing

Description: Bearing in mind the conclusions of the various seminars on automation, the Working Party will consider the question of the break-even point of automated equipment in terms of greater efficiency in manufacturing processes and the factors which inhibit its optimum use.

Method of work: The Working Party will prepare an analytical and comparative study on this subject.

2	1980
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01(E).3.3. The use of automation in the economically developing countries of the ECE region

Description: The Working Party will contribute to the collective effort of the various organs of the United Nations system to promote the application of computer 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.

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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Method of work: The Working Party will prepare, with the aid of governmental rapporteurs, a study of trends in the requirements for automated equipment in the industries of the ECE member countries concerned and a technico-economic and social assessment of the installation and use of this equipment.

2	1981
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01(E).3.4. Seminar on industrial robots and programmable logical controllers

Description: The technico-economic and social aspects of introducing robots and programmable controllers into the engineering industry will be studied with a view to the preparation of recommendations concerning means of employing them in various socio-economic contexts.

Method of work: The Working Party will organize a seminar on this subject which, at the invitation of the Government of Denmark, will be held from 5 to 10 September 1977 at Copenhagen.

1	1977
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01(E).3.5. Analysis of the introduction of new production methods in engineering as related to the man-machine-management system, based on an inter-disciplinary approach regarding the interaction of techno-economic and social factors

The description and method of work of this topic will be defined at the next session of the Working Party on Automation.

2	1981
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01(E).3.6. Micro-computers

The description and method of work of this topic will be defined on the basis of a communication from the delegation of the USSR and on the basis of the replies to a circular letter seeking the views of countries on the scope of this topic.

2	1979
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<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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01(E).3.7. Computer-Aided Design in Industry

Description: As a result of the conclusions and recommendations of the ECE Seminar in Prague in 1976, the Working Party endorsed the proposal for studying in depth the development of computer-aided design as an integrated part in manufacturing and its contribution to labour productivity and production efficiency.

Method of work: The Working Party will organize a seminar on this subject which will be held in Geneva in autumn 1978. The secretariat will convene a preparatory meeting in 1977 for this seminar.

1	1978
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01(E).3.8. Application of computers for controlling complex technological processes

Description: [A description for this topic will be submitted to the Working Party by the USSR delegation.]

Method of work: The Working Party will organize a seminar on this subject which, at the invitation of the Government of the USSR, will be held in Moscow in 1979.

1	1979
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WORK AREA 01(E).4: ENVIRONMENTAL AND RESOURCE-SAVING PROBLEMS

01(E).4.1. Application of automation for optimal use of resources

Description: The Working Party will contribute to the solution of environmental and resource-saving problems by analysing the practical results of automation from the viewpoint of the rational and efficient use of raw materials, energy and labour.

Method of work: The Working Party, in co-operation with the Senior Advisers to ECE Governments on Environmental Problems, will undertake a study of this subject in the fields which are currently being considered by the various Principal Subsidiary Bodies of the Commission; this study may serve as a contribution towards a general, in-depth investigation of the topic.

2	1981
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<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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WORK AREA 01(E).5: STATISTICS AND INFORMATION

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

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

Method of work: The Working Party in co-operation with the Conference of European Statisticians and experts in the mechanical engineering and electrical industries will prepare statistical tables biennially on the basis of data published in national and international statistics.

cont.

01(E).5.2. Information exchange systems in the field
of automated manufacturing

The description and method of work for this project will be discussed at the next session of the Working Party on the basis of a proposal to be formulated by Czechoslovak experts. These will be circulated to countries for comments which will be presented at the next session of the Working Party for its consideration.

3

1980

02. - AGRICULTURE

	<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
<u>WORK AREA 02.1: LONG-TERM TRENDS AND PERSPECTIVES</u>		
<u>02.1.1. 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.	
<u>02.1.1.1. Long-term market developments</u>		
<u>Description:</u> The Committee will review the supply and demand developments for feedingstuffs, milk and meat in Europe until 1985.		
<u>Method of work:</u> The secretariat will provide a short synoptic paper on the basis of available material, supplemented by further information wherever required, for in-depth discussion by the Committee at its twenty-ninth or thirtieth session.	1 to 2	1978 or 1979
<u>02.1.1.2. Reports on output, expenses and income</u>		
<u>Description:</u> Within the actual possibilities of the secretariat of preparing such reports, the Committee will continue to review periodically past trends in output, investments, operating expenses, incomes, etc., in agriculture in ECE countries.		
<u>Method of work:</u> A draft of the eighth report in this series, based on the replies to a questionnaire requesting the same statistical information as the questionnaire adopted for the seventh report in this series, will be produced by the secretariat and submitted for discussion to the thirty-first Committee session.	3	1980
<u>02.1.2. Co-operation with the Senior Economic Advisers on the Overall Economic Perspective of the ECE Region up to 1990</u>		
<u>Description:</u> Without engaging in any long-term projections of its own, the Committee will consider the Overall Economic Perspective prepared by the Senior Economic Advisers to ECE Governments, and will make available to the Senior Economic Advisers its comments on the paper as far as it relates to agriculture and as far as countries consider such comments necessary.		

Estimated duration (in years)	Estimated termination year
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Method of work: The secretariat will distribute the relevant documentation for the Committee's examination, and will assist it in its work on this project.

2	1978
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02.1.3. Study of long-term perspectives for agriculture in southern Europe (including island countries) with particular reference to the agrarian structures and employment

Description: Bearing in mind the special problems which confront agriculture in the countries of southern Europe (including the island countries), particularly regarding agrarian structures and employment, the Committee has transmitted this project to the FAO/ECE Working Party on Agrarian Structure and Farm Rationalization to consider the possibility of undertaking studies of special interest to these countries, which, however, should not overlap with the work done by FAO and OECD.

Method of work: To be determined by the Working Party.

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

02.2.1. Review of current developments in agriculture and agricultural trade

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

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

	Estimated duration (in years)	Estimated termination year
<u>Method of work:</u> For each selected commodity a report intended to serve as background document for discussion, will be produced by the secretariat.	cont.	
02.2.3. <u>Commodity problems of special interest to the member countries of the ECE which are developing from the economic point of view</u>		
<u>Description:</u> The Committee will select appropriate commodity problems concerning these countries (including the island countries) for consideration and decide on an appropriate method of work.	cont.	
02.2.3.1. Market outlook for high value agricultural products such as flowers		
<u>Description:</u> The Committee will evaluate medium-term market prospects and identify the major production problems involved (at the request of interested countries).		
<u>Method of work:</u> A study based on the replies to a questionnaire approved by the Committee will be prepared by the secretariat for submission to the twenty-ninth and the thirtieth annual sessions.	2	1979
02.2.4. <u>Special activities aimed at promoting and facilitating international trade</u>		
02.2.4.1. Standardization of perishable produce		
(a) Elaboration of new UN/ECE standards		
(i) Cut flowers	4	1977
(ii) Egg products	2	1979
(iii) Dry and dried produce (apricots and figs)	4	1981
(b) Revision of UN/ECE standards	cont.	
(c) Collaboration in the FAO/WHO Food Standards Programme (fruit juices and quick frozen food)	cont.	
<u>Description:</u> The Committee through its Working Party will elaborate new and, when necessary, revise existing standards for selected products; it will also continue to collaborate with the FAO/WHO Codex Alimentarius Commission.		
<u>Method of work:</u> 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.	

	<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
02.2.4.2. International agricultural trade practices		
<u>Description:</u> The Committee will elaborate arbitration rules and harmonization of existing ECE general conditions of sale for agricultural products.		
<u>Method of work:</u> The work will be conducted by the Group of Experts on International Trade Practices of the Working Party on Standardization of Perishable Produce	4	1978
02.2.4.3. Market prospects and marketing problems of frozen and quick frozen food		
<u>Description:</u> Review of the situation and prospects of the market for frozen and quick frozen food in Europe and identification of the requirements and problems regarding marketing.		
<u>Method of work:</u> A symposium to be held in Hungary.	1	1977
02.2.4.4. Marketing problems relating to agricultural products		
<u>Description:</u> The secretariat will contact Governments for proposals as to which marketing problems they consider of interest and suggest as subject for a symposium. The secretariat will also contact other international organizations concerned with marketing problems for agricultural products to avoid all overlapping in the final decision of the topic, which will be taken at the twenty-ninth Committee session on the basis of the proposals made by Governments and the additional information provided by the secretariat.		
<u>Method of work:</u> A symposium to be decided by the Committee.		
<u>WORK AREA 02.3:</u> <u>SELECTED ECONOMIC AND TECHNOLOGICAL PROBLEMS</u>		
02.3.1. <u>Studies of problems relating to agrarian structure and farm rationalization */</u>		
02.3.1.1. Technical progress, concentration, co-operation and specialization in agriculture and their effects on agrarian structure		

*/ See also project 02.1.3.

	Estimated duration (in years)	Estimated termination year
<p><u>Description:</u> Subject for study selected by the FAO/ECE Working Party on Agrarian Structure and Farm Rationalization at its first (constituent) session.</p> <p><u>Method of work:</u> Several studies dealing with national developments and experience will be produced by government rapporteurs and discussed at the second session of the Working Party.</p>	1	1978
02.3.1.2. Social problems and corresponding measures arising out of changes in agrarian structure		
<p><u>Description:</u> Discussion topic selected by the FAO/ECE Working Party on Agrarian Structure and Farm Rationalization at its first (constituent) session.</p> <p><u>Method of work:</u> A round-the-table discussion to be held at the second session of the Working Party.</p>	1	1978
02.3.1.3. Economic efficiency of the main categories of farms and agricultural enterprises in ECE countries (with reference to specific products)		
<p><u>Description:</u> Subject for study selected by the FAO/ECE Working Party on Agrarian Structure and Farm Rationalization of its first (constituent) session.</p> <p><u>Method of work:</u> Several case studies analysing the situation in selected ECE countries will be prepared by government rapporteurs and discussed at the third session of the Working Party.</p>	2	1979
02.3.1.4. Development problems of agriculture in less favoured areas		
<p><u>Description:</u> Subject selected by the FAO/ECE Working Party on Agrarian Structure and Farm Rationalization at its first (constituent) session following a recommendation of the tenth FAO Regional Conference for Europe.</p> <p><u>Method of work:</u> A symposium to be held in Geneva. In view of the importance of the subject and the varied experience and problems in the ECE region it is expected that all participating Governments will nominate rapporteurs.</p>	1	1978

	<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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. Study of methodology of forecasting mechanization developments	3	1978
02.3.2.3. Studies of energy problems relating to mechanization		
(a) Means of reducing energy consumption in engines and tractors	3	1979
(b) Means of reducing energy consumption in drying installations	3	1979
(c) Means of reducing energy consumption in the heating of greenhouses	3	1979
02.3.2.4. Studies of ergonomic aspects of mechanization		
(a) Automation of the control of technological processes in mobile agricultural machines	3	1978
(b) Ergonomic aspects of the design of tractors	3	1978
02.3.2.5. Work on terminology (Terms and definitions of soil preparation)	5 - 6	1982-1983
02.3.2.6. Reports on more specific technical problems		
(a) Mechanization and automation of irrigation systems for field crops	4	1978
(b) Harvesting, post-harvest processing and storage of grain	3	1978
(c) Feeding methods and equipment for dairy and beef cattle	3	1978
(d) Mechanization of harvesting of grapes	3	1978
(e) Mechanical production, nursing and handling of seedlings	3	1978
(f) Modern equipment and development tendencies in air-conditioning of livestock buildings	3	1978
(g) High horse-power tractors and their implements	3	1978
(h) Methods and equipment for harvesting, processing, storage and utilization of forage from grass	3	1979

*/ See also project 02.4.1.

	<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
02.3.2.7. Annotated outlines of reports proposed for inclusion in the work programme		
(a) Methods and equipment of hail prevention	1	1977
(b) Technology of storage and mechanization of work in vegetable store-houses	1	1977
(c) Foreseeable developments of self-propelled harvesting machines	1	1977
(d) Methods and equipment for the mechanization of agricultural work on sandy soils	1	1977
(e) Swine manure handling systems	1	1977
(f) Technical aspects contributing to optimal utilization of agricultural machinery	1	1977
(g) Methods and equipment for handling crop residues	1	1977
(h) Drying, pelleting and handling of poultry manure	1	1978
(i) Big bales and bale handling of dry material	1	1978
(j) Mechanization of sugar-beet harvesting	1	1978
(k) Methods and equipment for improving the nutrient quality of straw	1	1978
(l) Methods and equipment for subsoiling	1	1978

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. cont.

02.3.3. Studies of selected technological and economic problems of special interest to the member countries of the ECE which are developing from the economic point of view

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

Method of work: To be determined by the Committee.

Estimated duration (in years)	Estimated termination year
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02.3.4. Other technological and economic problems

02.3.4.1. Economic and technological aspects of sugar
beet production.

Description: Discussion in depth of the economic and technological problems relating to sugar beet production in the ECE region.

<u>Method of work:</u> Symposium to be held in the USSR	2	1979
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02.3.4.2. The use of chemicals and biological innovations

Description: The secretariat will communicate to member countries after the twenty-eighth Committee session the proposals made by the preceding symposia on fertilizers and on feedingstuffs and will select the subject for the 1979 symposium on the basis of country replies.

<u>Method of work:</u> Symposium to be held in Geneva	2	1979
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02.3.4.3. Economic and technological aspects of pork production	2	1978
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02.3.4.4. Economic and technological aspects of the dehydration of green forage	2	1978
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Description: The subjects to be dealt with through technical reports are decided upon by the Committee at its annual sessions on the proposal of interested countries.

Method of work: The reports are prepared by government rapporteurs and are based on replies to questionnaires circulated to all member countries.

cont.

WORK AREA 02.4: ENVIRONMENTAL PROBLEMS RELATING TO
AGRICULTURE

02.4.1. Study of environmental problems relating to
agricultural mechanization

02.4.1.1. Studies of environmental aspects of mechanization

(a) Steps and measures to protect the environment under the specific angle of mechanization	4	1978
(b) The role of agricultural mechanization in preserving the environment	3	1978
(c) Methods and equipment for placing chemical products in agriculture	3	1979

	Estimated duration (in years)	Estimated termination year
<p><u>Description:</u> All studies are selected by the FAO/ECE Working Party on Mechanization of Agriculture and approved by the Committee.</p>		
<p><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.</p>		
	cont.	
<p>02.4.2. <u>The effects of pollution on vegetation (crops and forests)</u></p>		
<p><u>Description:</u> At the suggestion of UNEP, the Committee will organize a symposium to study in depth the effects of pollution on crops and forests.</p>		
<p><u>Method of work:</u> A symposium to be held in Poland, to be organized jointly with the Timber Committee and FAO, and in co-operation with the Senior Advisers to ECE Governments on Environmental Problems and UNEP. A preparatory meeting will be convened in 1977 to determine the programme of the Symposium.</p>		
	2	1978
<p>02.4.3. <u>Study on pollution problems in agriculture</u></p>		
<p><u>Description:</u> The Committee will decide on specific subjects under this project at a later date.</p>		
<p><u>Method of work:</u> To be determined by the Committee.</p>		
<p>WORK AREA 02.5: <u>STATISTICS</u></p>		
<p>02.5.1. <u>Harmonization and improvement of food and agricultural statistics</u></p>		
	cont.	
<p><u>Description:</u> Harmonization, improvement and development of food and agricultural statistics jointly with the Conference of European Statisticians and FAO.</p>		
<p><u>Method of work:</u></p>		
<p>(a) Preparation of a European Handbook of Economic Accounts for Agriculture covering both SNA and MPS types of accounts and links between them, presenting the set-up of the whole system, but with detailed presentation only of the commodity, production and capital formation accounts; further work on income and outlay accounts and capital formation accounts (by the joint secretariats)</p>		
	1	1977

	<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
(b) Review and updating of earlier recommendations on statistics and balances for meat and milk; meeting on the subject	2	1978
(c) Development of production and utilization statistics for other products, with priority for sugar beets and sugar, oil seeds (including oil and oil-cakes), and possibly followed by: potatoes, tobacco and fibre crops; informal meetings on these subjects as required	2	1978
(d) Study of problems involved in statistics of the agricultural labour force and labour input; the need for and timing of a meeting on this subject to be considered later	2	1979
(e) Preparation of a draft programme of statistics of food consumption and nutrition; circulation of the draft programme for comments; meeting to consider the draft programme	4	1980
(f) Study of methodological questions relating to farm book-keeping data and the possibility of their harmonization with other agricultural statistics; the need for, and timing of, a meeting on this subject to be considered later	3	1981
(g) Preparation of a glossary of terms used in agricultural statistics in the working languages of the region	4	1982
(h) Overall review of agricultural statistics in the light of developments of data requirements; preparation of a draft programme, serving as a framework for the systematic presentation of the data requirements; meeting to consider the draft programme	5	1983

03. - CHEMICALS

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

03.1.1. The energy requirements of the chemical industry

Description: The Committee will analyse the current energy consumption of the chemical industry (1965-1974) and future consumption trends for energy from 1975-1980, and also examine the optional use and conservation of energy.

Method of work: The secretariat will prepare a study on this subject under the guidance of an ad hoc Meeting of Experts and with the assistance of government rapporteurs. [The date of the ad hoc Meeting to be agreed by the Committee].

2

1977

03.1.2. Conservation of Energy in the Chemical Industry

Description: The Committee will assess the prospects for conservation of energy by the chemical industry, and the prospects for conversion of existing chemical manufacturing facilities to more readily available forms of energy (e.g. coal, lignite, etc.). Consideration will be given to means of measuring progress of conservation efforts (reference points or standards) for measuring efficiency of energy use per unit of product output.

Method of work: Under the guidance of the ad hoc Meeting of experts now studying energy requirements of the chemical industry (project 03.1.1.), the secretariat will initiate a study of what means of conservation have been developed, what degrees of energy conservation can be potentially achieved, and what national programmes are being developed for the chemical industry. Such units of measurement should be compatible with the units now accepted by the ECE group working on energy conservation.

2

1979

03.1.3. Systems of programming and long-term planning for chemical industry development

Description: The purpose of this project is to explore in depth the systems of programming and long-term planning in the chemical industry. [The Committee may want to define this project more closely especially with a view to actual systems and their results.]

Estimated duration (in years)	Estimated termination year
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Method of work: A seminar will be held in 1979 in Poland at the invitation of the Polish Government. Details on the objectives and the scope of the seminar will be determined by the Preparatory Meeting for the seminar, to be held in 1978.

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

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

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

2	1981
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03.1.5. Co-operation with the Senior Economic Advisers to ECE Governments on the Overall Economic Perspective for the ECE Region up to 1990

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

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

2	1978
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WORK AREA 03.2: CURRENT DEVELOPMENTS AND PROSPECTS, INCLUDING INTERNATIONAL TRADE

03.2.1. Periodic Review of the Chemical Industry

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

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

WORK AREA 03.3: SELECTED ECONOMIC AND TECHNOLOGICAL PROBLEMS

03.3.1. The use of chemicals in housing and industrial construction

Description: The Committee will study the impact of chemical products, especially plastics, on the construction industry.

Method of work: An ad hoc Meeting of Experts will formulate the project and the methods of work to be applied.

Estimated duration (in years)	Estimated termination year
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03.3.2. International economic and technical co-operation in the chemical industry

Description: The Committee will promote international co-operation in its field of activity in order to provide a more scientific basis for policy making and to increase the overall benefits to member countries through the systematic exchange of experiences and, whenever appropriate, through the use of joint projects.

Method of work: At the invitation of the Government of Hungary a symposium on this subject to be held in May 1977 as defined by the preparatory meeting held in November 1975.

1	1977
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03.3.3. Fermentation technology including the production of synthetic proteins

Description: The Committee will consider problems of the chemical industry which are concerned with the production of synthetic protein for animal as well as human consumption, especially those related to fermentation technology, as a new, energy-saving technology, and as a technology which may use new raw material sources including wastes.

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

2	1981
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03.3.4. Evaluation of the present techno-economic efficiency of the production of heavy hydrocarbons and synthetic gases from coal

Description: The Committee will consider the impact of recent price developments for petroleum-based raw materials and explore the possibilities for alternative raw material sources.

Method of work: [To be determined by the Committee, possibly in co-operation with the Committee on Gas and the Coal Committee].

2	1982
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03.3.5. Electrochemical technologies

Description: The Committee will consider selected aspects of electro-chemistry. [The Committee will have to decide on the precise formulation of the project and the further work to be done].

Method of work: [To be decided by the Committee in co-operation with the Senior Advisers to ECE Governments on Science and Technology].

2	1982
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	<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
03.3.6. <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. [A more detailed description of this project to be decided by the Committee].		
<u>Method of work:</u> [To be decided by the Committee]	3	1982
03.3.7. <u>Development of the petrochemical industry in member countries of the ECE which are developing from the economic point of view</u>		
<u>Description:</u> As suggested at the eighth session of the Committee, a study will be carried out on an overall plan for the petrochemical industry of the Mediterranean countries member of the ECE taking into account existing installations and new projects, and the desirability of specialization to obtain optimal capacity. The purpose of the study would be to provide a basis for policy decisions of Governments and industry aimed at co-ordinating activities in this field.		
<u>Method of work:</u> Work on this project will be carried out by a task force, composed of government rapporteurs from interested countries, meeting informally and reporting to the Committee at its annual sessions.	3	1980
<u>WORK AREA 03.4: SELECTED ENVIRONMENTAL AND RESOURCE-SAVING PROBLEMS</u>		
03.4.1. <u>The use of wastes from high-polymer products, especially plastics and synthetic fibres as secondary raw materials</u>		
<u>Description:</u> The Committee will examine the question of recycling and the use of wastes from high polymer products in order to make a contribution to the solution of problems arising in this field.		
<u>Method of work:</u> This subject will be dealt with in a symposium which will be hosted by the German Democratic Republic in 1978. A preparatory meeting will be held in January 1977 to determine the programme of the symposium.	1	1978

	<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
03.4.2. <u>Utilization and elimination of wastes in and by the chemical industry</u>		
<p><u>Description:</u> The Committee will study the utilization of wastes of the chemical industry or the wastes from other industries, to be used as raw materials for the chemical industry. This study will complement the study on Technical Progress and its Role in Combating High Waste Technologies in the Inorganic Chemical Industry as well as the Seminar on The Use of Wastes from High Polymer Products, especially Plastics and Synthetic Fibres as Secondary Raw Materials.</p>		
<p><u>Method of work:</u> An ad hoc Meeting of Experts will formulate the project more precisely and also decide on the methods of work to be applied.</p>	2	1979
03.4.3. <u>Use as chemical raw materials of natural products (cellulose) or those from the sea</u>		
<p><u>Description:</u> Against the background of the rising cost of traditional chemical raw materials, the Committee will explore the possibilities of alternative sources. [The Committee will have to define in more detail the scope of this project which was suggested during the eighth session of the Committee].</p>		
<p><u>Method of work:</u> [To be defined by the Committee]</p>	2	1981
03.4.4. <u>Use of chemical treatment for reducing atmospheric pollution by sulphur oxide and gaseous pollutants in general</u>		
<p><u>Description:</u> The Committee will continue to examine environmental problems related to the chemical industry, particularly in respect of air and water pollution and the use of water resources.</p>		
<p><u>Method of work:</u> [To be determined by the Committee, possibly in co-operation with the Senior Advisers to ECE Governments on Environmental Problems].</p>	2	1982
03.4.5. <u>Study of the noxious effects of specific chemical substances, such as polyvinyl-chloride</u>		
<p><u>Description:</u> Within the framework of the Committee's activities on the discharge of toxic substances specific case studies will be examined. [To be further defined by the Committee].</p>		
<p><u>Method of work:</u> [To be determined by the Committee].</p>	2	1982

	Estimated duration (in years)	Estimated termination year
03.4.6. <u>Current pollution standards in the fertilizer industry</u>		
<p><u>Description:</u> In accordance with the recommendations of the 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.</p>		
<u>Method of work:</u> [To be determined by the Committee].	2	1982
<u>WORK AREA 03.5: STATISTICS AND INFORMATION</u>		
03.5.1. <u>Bulletin of imports and exports in chemical products</u>		
<p><u>Description:</u> The Committee will continue to promote the collection of statistics on a comparable basis regarding the chemical industry, its raw material sources and its markets.</p>		
<u>Method of work:</u> The secretariat will collect the requisite information from available United Nations statistical sources and publish an <u>Annual Bulletin of Trade in Chemical Products</u> , covering exports and imports of chemical products.		cont.
03.5.2. <u>Development of internationally comparable statistics and statistical classification</u>		
<p><u>Description:</u> The Committee will (a) advise the secretariat on the collection and preparation of statistics on the chemical industry, on a comparable basis for ECE countries and others; (b) give guidance to the secretariat on its annual updating of statistical information on the principal chemical products dealt with in the quinquennial survey; (c) examine methodological questions concerning concepts, definitions and methods of measurement; (d) guide the secretariat in developing a methodology of 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.</p>		
<u>Method of work:</u> Work is pursued by the secretariat, as necessary, in co-operation with the secretariats of other bodies concerned. <u>Ad hoc</u> meetings on specific questions will be held jointly by the Committee and the Conference of European Statisticians as required.		cont.

O4. - COAL

Estimated duration (in years)	Estimated termination year
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WORK AREA O4.1: MEDIUM AND LONG-TERM PERSPECTIVES

O4.1.1. Future role of coal in the energy economy of the region

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

Method of work: These questions will be examined by the Committee at its sessions once in every two years or, if special aspects are to be singled out, by the appropriate subsidiary bodies, either through a study or a symposium. The study presently undertaken by the Working Party on Coal Trade entitled "Perspectives of the coal industry in the ECE region" will be updated after 1977.

O4.1.1.1. Perspectives of the coal industry in the ECE region

cont.

O4.1.2. Co-operation with the Senior Economic Advisers to ECE Governments on the Overall Economic Perspectives of the ECE region up to 1990

Description: The Committee will consider and comment upon the Overall Economic Perspective prepared by the Senior Economic Advisers to ECE Governments, and will make available to the Senior Economic Advisers, the results of its work, on the relevant projects (e.g. O4.1.1. and O4.2.2.) for use in their work.

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

3

1978

WORK AREA O4.2: CURRENT DEVELOPMENTS AND PROSPECTS INCLUDING INTERNATIONAL TRADE

O4.2.1. Review of the short-term fluctuations of demand for and supply of solid fuels

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

	Estimated duration (in years)	Estimated termination year
04.2.1.1. Review of the coal market particularly of supplies and requirements of solid fuels.		
<p><u>Method of work:</u> These questions will be considered twice a year by the Working Party on Coal Trade on the basis of forecasts supplied by Governments and consolidated by the secretariat.</p>	cont.	
04.2.2. <u>Review of the situation and prospects of coal in the light of government plans and policies</u>		
<p><u>Description:</u> This project aims at an exchange of views and information on national coal policies, as part of national energy policies: at an assessment of the development of the major underlying factors; at a comparison of such policies; and at the identification of areas in which intensified inter-governmental 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).</p>		
04.2.2.1. Annual survey of the coal situation and its prospects.		cont.
<p><u>Method of work:</u> The Committee will implement project component 04.2.2.1. through annual surveys of the coal situation prepared by the secretariat on the basis of government replies to a questionnaire. Reports of particular relevance to the activities of the Senior Economic Advisers will be made available to them for information and appropriate use in their work.</p>		
04.2.3. <u>Coal utilization in selected consuming sectors</u>		
<p><u>Description:</u> The purpose of this project is to improve the understanding of short and medium-term consumption trends and to consider related policy measures.</p>		
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	1979
04.2.3.3. Use of coal in the metallurgical industry including formed coke	3	1981

Estimated duration (in years)	Estimated termination year
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Method of work: The project will be implemented as appropriate, by studies or symposia under the auspices of the Working Party on Coal Trade in close co-operation with the other Principal Subsidiary Bodies concerned.

WORK AREA 04.3: SELECTED ECONOMIC AND TECHNOLOGICAL PROBLEMS

04.3.1. Productivity in underground mining

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

04.3.1.1. In the field of mechanization and automation of various functions

(a) Mechanization and automation of face work	2	1980
(b) Mechanization and automation of road driving in rock and coal	3	1981
(c) Working of seams of medium thickness (about 1 to 2 m.)	3	1981
(d) Working of thick coal seams (more than about 2 m.)	3	1981
(e) Working of coal seams according to natural, technical and economic conditions	3	1981
(f) Recent developments in the support of face ends and junctions between face and access roadways	3	1983
(g) Increased labour productivity	..	..
(h) New mining, technologies	..	..
(i) Mechanization and automation of equipment	..	..
(j) Reinforcement of excavated areas	..	..
(k) Exploitation of thin, steeply inclined seams	..	..
(l) Coal extraction under towns and industrial areas	..	..
(m) Reduction of production costs	..	..

	Estimated duration (in years)	Estimated termination year
04.3.1.2. In the field of training of miners, of scientific and technical personnel		
(a) Qualification required at present or to be required in the future for mine-workers and coal industry scientific and technical executive personnel	2	1980
(b) Possibilities and methods of encouraging executive personnel to work in the coal industry	2	1981
04.3.1.3. In the field of concentration of operations - concentration indices	cont.	
04.3.1.4. In the field of modern management techniques and policies		
(a) Organization, methods and criteria for the optimization of work combining coal production and use	2	1980
(b) Structure of management in the coal industry, its development and efficiency	2	1982
(c) Utilization in respect of time, of equipment, mining systems and manpower	2	1982
(d) Methods of computerized planning, with particular reference to methods of forecasting production costs and coal prices, and selection of criteria and methods applicable in short and long-term optimization	3	1983

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 and the discussion will be consolidated in a report high-lighting common trends, differences and areas of possible intensified industrial co-operation. The Group of Experts on Productivity and Management Problems is called upon to consider the inclusion of projects 04.3.1.1. (g) - (m) in the programme of work.

Estimated duration (in years)	Estimated termination year
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04.3.2. Economic and technical problems linked with the further development of open-cast mining

Description: The purpose of this project is to initiate and develop an exchange of experience and views on open-cast mining technologies and related economic, environmental, operational and other problems with a view to speeding up the transfer of advanced technologies and to identify areas of inter-governmental and industrial co-operation. The problems selected for consideration are:

04.3.2.1. Use of heavy equipment	2	1978
04.3.2.2. Establishment of internationally comparable productivity indicators	2	1978
04.3.2.3. Reclamation of excavated open-cast coalfields	1	1976
04.3.2.4. Selected open-cast mining problems	cont.	?

Method of work: The project will be implemented by the Group of Experts on Open-Cast Coal Mines. Project component (1) will be the subject of a symposium to be organized in the German Democratic Republic in 1978. Project components (2) and (4) will be dealt with in meetings of the Group of Experts on the basis of country monographs established along agreed outlines. As regards project component (3) a consolidated report will be prepared by Czechoslovak experts on the basis of country monographs; the report will be submitted to the Symposium on Environmental Problems resulting from Coal Industry Activities (Katowice, October 1976).

04.3.3. Technical problems of safety and health risks

Description: The purpose of this project is to take stock, through an exchange of information and experience, of progress achieved in the reduction of sudden outbursts of coal and gas and in the reduction of nuisances such as dust and noise affecting the safety and health of miners. Two problems have been singled out for consideration:

04.3.3.1. Sudden outbursts of coal and gas	2	1982
04.3.3.2. Prevention of dust	2	1977

Estimated duration (in years)	Estimated termination year
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Method of work: The project will be implemented by the Group of Experts on Productivity and Management Problems in the Coal Industry through symposia as far as sudden outbursts of coal and gas are concerned, and in regular meetings as far as the other project component is concerned. The next symposium on sudden outbursts of coal and gas could suitably take place in 1982, i.e. seven years after the last symposium on this question held in Donetsk (Ukrainian SSR) in October 1975. A Preparatory Meeting might usefully take place in 1981. The consideration of dust abatement techniques will be based on country monographs established along agreed lines; a consolidated report on this issue will be prepared in 1977 by a government rapporteur in order to identify common trends and opportunities for closer co-operation.

04.3.4. International co-operation on R and D projects

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

04.3.4.1. Exchange of information on R and D programmes and institutes

cont.

04.3.4.2. Co-operation in research on selected projects

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|--|---|------|
| (a) Research and development in road-driving in coal and rock | 2 | 1978 |
| (b) Trends in the mechanization and automation of coal faces and face-ends | 2 | 1978 |
| (c) Technological trends in coal preparation and utilization | 2 | 1978 |

Method of work: The project is implemented by the Meetings of Directors of National Mining Research Institutes which will be held once in two years and will be connected with visits of national R and D institutes and study tours to coalfields. Selected problems will be the subject of symposia organized in close co-operation with the other subsidiary organs of the Committee concerned and with other Principal Subsidiary Bodies of the Commission

Estimated duration (in years)	Estimated termination year
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interested in the subject matter. Project (c) has been included by the Coal Committee upon a suggestion by the Group of Experts on the Utilization and Preparation of Solid Fuels to the effect that the Meeting of Directors pay attention also to long-term problems of coal preparation and use.

04.3.5. New uses for coal

Description: The exchange of information and views on this subject will aim at the identification of new uses for coal, the acceleration of technical progress in the field of coal preparation, conversion and use, the facilitation of technology transfer and the initiation of industrial co-operation in areas of common interest. While focusing attention on the technical aspects of coal preparation and use, this would require the integrated consideration of related questions of economic viability, environmental acceptability and operational feasibility. The following project components will be considered:

04.3.5.1. Gasification and liquefaction of coal

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|---|---|--------------|
| (a) Details of intensified co-operation on selected R and D projects in this field (see also 04.5.1.2.) | 1 | 1977 |
| (b) Symposium on the gasification and liquefaction of coal | 2 | 1978 or 1979 |

04.3.5.2. Use of solid fuels in the metallurgical industry

- | | | |
|--|---|------|
| (a) Automation of coking plants and the use of computers not only in the design stage but also for the optimization and control of process | 2 | 1979 |
| (b) Technical experience and environmental and economic effects of the introduction of dry quenching of coke (see also 04.4.1.4.) | 2 | 1980 |
| (c) Technical and economic aspects of new technologies and improvements made in conventional methods of metallurgical coke manufacture | 1 | 1977 |

04.3.5.3. Selected problems of coal preparation and use

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|--|---|------|
| (a) Technologies for the homogenization of coal to meet the requirements of preparation plants and consumers | 1 | 1977 |
|--|---|------|

	Estimated duration (in years)	Estimated termination year
(b) Mechanization and automation of coal preparation plants	2	1979
(c) Integrated production from coal of other energy forms (liquid and gaseous fuels and electricity) and chemical products	2	1979
(d) Preparation of brown coals according to their various applications	2	1980
(e) Use of coal for the long-distance heating of towns and cities	2	1981
(f) Preparation of coal intended for the domestic sector	2	1981
(g) Fluidised bed combustion	..	..
(h) Coal use efficiencies in various industrial processes as a result of the development of new technologies	..	..
(i) Methodology of assessing energy balances	..	..
(j) Study of problems identified by the Seminar on Technologies for the Utilization of Low-calorie Fuels	..	..

Method of work: The project will be implemented by the Group of Experts on the Utilization and Preparation of Solid Fuels. As regards gasification and liquefaction of coal, a symposium is foreseen to take place in Poland in 1978 or 1979; an ad hoc meeting will take place in 1977 in order to explore the possibilities of more intensified intergovernmental co-operation in this field. The Committee will ensure close co-operation with the Committee on Gas, the Senior Advisers to ECE Governments on Science and Technology and other Principal Subsidiary Bodies concerned. As concerns project components 04.3.5.3. (g) - (j), the Group of Experts will consider the usefulness and modalities of their consideration at their 1977 session. As regards the other project components, the Group of Experts will undertake studies along agreed lines. As a first step, country monographs will be prepared by government rapporteurs on the basis of an agreed outline. After consideration by the Group of Experts, these monographs will be consolidated in a general report reflecting common trends and identifying areas of potential industrial co-operation. The Senior Advisers to ECE Governments on Science and Technology will be kept informed of projects of particular interest to them.

Estimated duration (in years)	Estimated termination year
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04.3.6. Harmonization of trade classifications, standards and certifications

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

04.3.6.1. Comparison of systems of classification of hard coals by type	-	1977
04.3.6.2. Unified trade nomenclatures	..	..

Method of work: Project component (1) will be implemented by the Group of Experts on the Utilization and Preparation of Solid Fuels. The methods of work to be used in respect of project component (2) will be determined by the Committee in 1977.

WORK AREA 04.4: ENVIRONMENTAL AND RESOURCE-SAVING PROBLEMS

04.4.1. Environmental problems resulting from coal mining and ancillary activities

Description: Through an exchange of relevant information and experience, the Committee will aim at promoting the environmental acceptability of coal production, conversion and use. The following problems will be dealt with:

04.4.1.1. Environmental problems resulting from coal industry activities	1	1976
04.4.1.2. Land reclamation	2	1977
04.4.1.3. Desulphurization of coal	2	1981
04.4.1.4. Technical experience and environmental and economic effects of the introduction of dry quenching of coke (see also 04.3.5.2.(b))	2	1980
04.4.1.5. Current position and recent developments relating to the control of atmospheric and water pollution caused by the operation and products of coking plants	2	1981

Estimated duration (in years)	Estimated termination year
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Method of work: Project component (1) will be dealt with by the Symposium on Environmental Problems resulting from Coal Industry Activities (Katowice, October 1976). Project component (2) consists of a further elaboration of project 04.3.2.3. in the light of the results of the Symposium mentioned above. Project components (3), (4) and (5) will be dealt with by the Group of Experts on the Utilization and Preparation of Solid Fuels during its regular meetings; studies will be undertaken to assess the progress achieved in these fields since the last consideration of these topics. In all cases the Committee will ensure close co-operation with other Principal Subsidiary Bodies concerned, 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 the exchange of relevant information and experience the Committee will aim at promoting a more careful utilization of scarce natural resources and at reducing the technical and economic constraints which hitherto impeded greater efficiencies to be obtained. The following problems will be considered:

04.4.2.1. Reduction of the quantities of rock and waste resulting from the extraction and preparation of coal	3	1979
04.4.2.2. Better use of available coal resources and increased economy and efficiency of coal extraction techniques	3	1978
04.4.2.3. Utilization of waste obtained in the production and consumption of coal	2	1980

Method of work: Project component (1) will be jointly studied by the Group of Experts on Productivity and Management Problems in the Coal Industry and by the Group of Experts on the Utilization and Preparation of Solid Fuels on the basis of an agreed outline. Project component (2) will be considered by the Group of Experts on Productivity and Management Problems in the Coal Industry as far as underground mining was concerned, and by the Group of Experts on Open-Cast Coal Mines, as far as surface mining was concerned. Project component (3) falls under the purview of the Group of Experts on the Utilization and

Estimated duration (in years)	Estimated termination year
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Preparation of Solid Fuels. In all cases, the consideration will be based on country reports which will, at a later stage, be consolidated into a general report.

WORK AREA 04.5: INDUSTRIAL CO-OPERATION

04.5.1. Examination of possibilities for industrial co-operation

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

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

04.5.1.2. Ad hoc meeting to consider details of intensified co-operation on selected R and D projects in the field of coal gasification, liquefaction and treatment, and to draw up a list of subjects most appropriate for such co-operation. 1 1977

Method of work: Project component (1) will be implemented by the Meeting of Directors of National Mining Research Institutes (see also 04.3.4.) and project component (2) by the Group of Experts on the Utilization and Preparation of Solid Fuels (see also 04.3.5.1. (a)). The Committee will co-operate, as appropriate, with the Principal Subsidiary Bodies concerned, in particular, the Committee on the Development of Trade.

04.5.2. Selected problems of industrial co-operation with member countries of the ECE which are developing from the economic point of view

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

Method of work: To be determined by the Committee in 1977.

Estimated duration (in years)	Estimated termination year
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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 requisite quarterly and annual information from Governments and publish them in the Quarterly and Annual Bulletins in line with the guidance provided by the Group of Experts on Coal Statistics and the Conference of European Statisticians.

04.6.2. Development of internationally comparable statistics

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

04.6.2.1. Capital formation, production costs and investment intentions in the European coal industries	cont.
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04.6.2.2. New or improved internationally comparable productivity measurements	cont.
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04.6.2.3. Use of computers for solving statistical problems of the European coal industries (this subject will deal with the storage, retrieval and treatment of statistical data with the help of computers and hence affect almost all other project components).	cont.
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04.6.2.4. Number and type of shifts worked per 100 tons of coal produced	cont.
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04.6.2.5. The principles of presenting statistics of achievements of high production faces in such a way as to improve the general overall face performance	3	1979
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04.6.2.6. Comparative analysis of national systems of accounting labour consumption in the coal industry	5	1979
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	Estimated duration (in years)	Estimated termination year
04.6.2.7. Productivity forecasts for European coal mines, by comparison with methods used in mines in various countries having the highest productivity levels	3	1980
04.6.2.8. Statistical methods of recording and analysing working time at mechanized coal faces in order to minimize lost time	3	1980
04.6.2.9. Application of statistical methods to the selection of methods of working and of seams to be worked in order to optimize planned profitability	3	1980
04.6.2.10. Statistical methods applied to coal preparation and coal blending for market purposes	3	1980
04.6.2.11. Preparation of consumption statistics broken down by sector, including statistics on the processing of coal into secondary energy sources	3	1980
04.6.2.12. Measures of efficiency in the extraction, upgrading, conversion and use of coal	3	1981
04.6.2.13. Development of definitions on the following terms: low-rank solid fuels, low-calorific-value solid fuels, coal beneficiation products, brown coal, lignites, peat	2	1978

Method of work: 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. Use of computers in the coal mining industry

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

- 04.6.3.1. Automation of coking plants and the use of computers not only in the design stage but also for the optimization and control of process

Method of work: The project component (1) is implemented by the Group of Experts on the Utilization and Preparation of Solid Fuels (see 04.3.5.2. (a)).

2 1979

Estimated duration (in years)	Estimated termination year
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04.6.4. Exchange of non-statistical information

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

04.6.4.1. Addresses of government authorities, major enterprises, associations and institutes, working in the field of coal (see also 04.5.1.1.)

04.6.4.2. Reports transmitted by intergovernmental organizations on activities of interest to the Coal Committee

04.6.4.3. List of documents in the energy field published by ECE

Method of work: On the basis of a questionnaire prepared by the secretariat, the Committee will assemble, and regularly up-date, a list of addresses of institutions working in the field of solid fuels. Representatives of the Secretariats of the intergovernmental organizations concerned will keep the Committee informed of activities of their respective organizations in the field of coal. The secretariat will prepare annually a list of documents in the energy field published by ECE. Bibliographies will be annexed to reports on substantive matters. cont.

05. - ENVIRONMENT

WORK AREA 05.1: PROSPECTIVE TRENDS AND PROBLEMS

05.1.1. Study on integration of environmental policies into socio-economic development planning

05.1.1.1. Integrated planning framework

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

Method of work: At the first stage, co-operation will be established with the Committee on Housing, Building and Planning and, in particular, its Working Party on Urban and Regional Planning and Development to examine conceptual, institutional and methodological questions raised by integrated planning. In particular, the

Estimated duration (in years)	Estimated termination year
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Senior Advisers will co-sponsor the project and join in an ad hoc meeting on this project to be held in November 1977. The Senior Advisers will also co-sponsor the proposed seminar.

3	1979
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05.1.2. Co-operation with the Senior Economic Advisers to ECE Governments on the Overall Economic Perspective for the ECE Region up to 1990

Description: The project will focus on the environmental aspects of the Overall Economic Perspective as elaborated by the Senior Economic Advisers

Method of work: An ad hoc task force will prepare the framework for a contribution which will be submitted to the sixth session of the Senior Advisers on Environmental Problems. The meeting, to be hosted by the Government of the Netherlands, will be held in Spring 1977 in Bilthoven (Netherlands).

2	1979
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WORK AREA 05.2: CURRENT DEVELOPMENT AND PROSPECTS IN ENVIRONMENTAL POLICIES

05.2.1. Exchange of information and views on environmental policies and strategies in ECE countries

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

Method of work: On a biennial basis, every even year, member Governments will prepare country monographs according to agreed guidelines. (The next series of monographs are due by 31 May 1978). Copies will be submitted to the secretariat, and also circulated directly between member states, in at least one of the official ECE languages according to the mailing list provided by the secretariat. The secretariat will prepare a synthesis paper, based on an analysis of these monographs and their annexes containing information on three priority issues in each country, and will be reviewed by the Senior Advisers at their seventh annual session, with a view to selecting topics for in-depth discussion at the two following annual sessions and to providing guidance for future activities.

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Estimated duration (in years)	Estimated termination year
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WORK AREA 05.3: ENVIRONMENTAL POLICY AND MANAGEMENT ISSUES

05.3.1. Environmental impact assessment

05.3.1.1. Study of procedures and relevant experience relating to the activities of Governments in developing the capabilities of their countries to predict adequately environmental consequences of economic activities and technological development

Description: In order to assist ECE Governments to develop policy instruments needed to ensure that environmental concerns are fully taken into account in socio-economic planning and management, the Senior Advisers will undertake work on environmental impact assessment.

Method of work: A seminar on practical experience in environmental impact assessment will be held in 1979. The seminar will be based on selected case studies relating to projects in various sectors, for example, the environmental impact of airborne pollution. A preparatory meeting will be held in late 1977.

3 1979

05.3.1.2. Methods and models for evaluating the impact of man's activities on the environment

Description: The Senior Advisers will examine the practical use of formal methods and models in the environmental decision-making process. The results of these activities would constitute a useful input to the project on Environmental Impact Assessment.

Method of work: As a follow-up to the work already accomplished (e.g. the digest of methods and models and the linkage of economic and pollution abatement models), work will continue on practical techniques within the framework of the project on Environmental Impact Assessment. As a first step in this respect the secretariat will prepare for the next session of the Senior Advisers a digest of existing methodologies and of their potentialities for contributing to Environmental Impact Assessment; e.g. those relating to airborne pollution. An ad hoc meeting will be convened, if appropriate, to analyse the replies to the questionnaire circulated in 1976.

2 1978

Estimated duration (in years)	Estimated termination year
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05.3.1.3. Public participation in decision-making processes

Description: Having recognized the major importance in the decision-making process of public participation in appraising environmental impacts, the Senior Advisers decided to undertake work on this subject.

Method of work: It was agreed that suggestions for the methods of work would be presented to the sixth session of the Senior Advisers.

2	1978
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05.3.1.4. Economic assessment of environmental damage

Description: Consideration will be given to the development of a common methodology for assessing the environmental damage caused by pollution. As a first step, attention will be given to damage from air pollution.

Method of work: An intergovernmental task force, headed by the USSR and in which at present five other countries are participating, has been established. Its programme of work has been circulated by the lead country. A report will be submitted shortly and the first meeting of the task force will be held in Geneva in late 1977.

3	1979
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05.3.1.5. Study of economic incentives for environmental policies

Description: A study will be undertaken on economic incentives with a view to the encouragement of more rational use of resources and protection against pollution. Consideration will be given, inter alia, to physical and financial measures such as charges, tax policies, subsidies, sanctions (e.g. fines), etc.

Method of work: The preliminary study will be undertaken by the secretariat and a report submitted to the Senior Advisers for further action.

[To be considered by the Senior Advisers at their sixth session.]

Estimated duration (in years)	Estimated termination year
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05.3.1.6. Exchange of information on contingency plans to handle environmental emergencies

Description: An exchange of information on the state of preparation for the prevention and clean-up of spills of oil and hazardous or toxic materials will be organized. Specifically, a study will be prepared by government rapporteurs to examine alerting and reporting systems, contingency plans, prevention and clean-up emergency situations in the various countries of the ECE region.

Method of work: Using the study as background material, a seminar will be held in due course to consider experience of Governments in handling environmental emergencies.

[To be considered by the Senior Advisers at their sixth session.]

05.3.2. Inter-disciplinary planning and management problems

05.3.2.1. Problems of co-ordinated and integrated land-use planning for environmental protection and improvement

Description: The Senior Advisers will consider the requirements for the planning and management of land that, in the long term, are rational from an ecological point of view. The purpose of this project will be to establish criteria and guidelines for land-use planning as a support to the environmental policy of ECE Governments.

Method of work:

[To be considered by the Senior Advisers at their sixth session.]

05.3.2.2. Selected environmental problems of tourism

Description: As a follow-up to the Symposium on the Planning and Development of the Tourist Industry in the ECE Region and in accordance with Commission decision K (XXXI), the Senior Advisers will contribute to an inter-disciplinary examination of the tourist industry, in particular by studying the environmental impact of recent and foreseeable trends in the physical location of related activities and facilities. The purpose of the project is to develop knowledge and information that would permit member Governments to consider possibilities for greater harmonization of policy in the long-term interest of tourism development in the region.

Estimated duration (in years)	Estimated termination year
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Method of work: In co-operation with all other Principal Subsidiary Bodies concerned, in particular the Committee on Housing, Building and Planning, the Senior Advisers will focus attention on land-use problems and criteria for the location of tourism development. As a first step, the secretariat will collect from Governments existing information on coastline surveys that have been carried out in member countries. This material will constitute the basis for further activities with the aim of analyzing data requirements that are essential for long-term environmental planning related to tourism development in coastal areas. A report will be submitted to the sixth session.

4	1980
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05.5.2.3. The role of transportation in urban planning, development and environment

Description: As a follow-up to the recommendations of the Second Seminar on the Role of Transportation in Urban Planning, Development and Environment, the Senior Advisers will be kept fully informed of the further activities undertaken by the Committee on Housing, Building and Planning.

Method of work: The environmental aspects will be taken care of through the active participation at the secretariat level.

4	1980
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05.5.2.4. Treaties, conventions, agreements and international programmes concerning environmental problems of large areas in the ECE region

Description: (i) The Senior Advisers will keep themselves currently informed about progress in the implementation of treaties, conventions, agreements and international programmes concerning environmental problems of large areas in the ECE region. (ii) They will also continue to promote international co-operation on environmental problems concerning large areas in the ECE region and, as a case study, consider any request from UNEP with regard to the UNEP Blue Plan for the Mediterranean.

Method of work: The secretariat will undertake to submit to the Senior Advisers appropriate reports concerning progress on subject (i) above; (ii) the secretariat will also prepare a report on possible future co-operation with UNEP regarding implementation of the Blue Plan.

cont.

Estimated duration (in years)	Estimated termination year
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WORK AREA 05.4: RESOURCES AND WASTE PROBLEMS

05.4.1. Natural resources management in terms of ecological considerations

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

Description: As a follow-up to the Seminar on the Collection, Disposal, Treatment and Recycling of Solid Waste, the Senior Advisers will examine policies and strategies which could be applied to encourage the effective recycling, re-use and recovery of municipal and industrial solid wastes.

Method of work: Draft terms of reference have been prepared by the secretariat for a task force to be led by Italy, which will examine, inter alia, present recovery practices. It is anticipated that the task force will start its work in 1977, taking into account the relationship of this project to the project on non-waste technology.

4

1980

05.4.1.2. Low- and non-waste technology

Description: As a follow-up to the ECE Seminar on the Principles and Creation of Non-waste Technology and Production, the Senior Advisers with the support of UNEP will take measures to compile a compendium of available knowledge on low and non-waste technologies and to stimulate the development of methodologies for analysis and evaluation of various technologies, bearing in mind that the results of this work should also be made available to the developing countries of the world.

Method of work: As a first step, the secretariat (together with UNEP) would prepare a specific proposal for the implementation of this project, transmit it to member Governments, and seek an expression of their interest in contributing to the various elements of the project as described above. The final proposal will be considered by the Senior Advisers at their sixth session. In addition the secretariat will undertake a study of the possibilities for the utilization of recycled paper within the United Nations system.

4

1980

Estimated duration (in years)	Estimated termination year
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05.4.1.3. Control of discharges of toxic chemicals and toxic wastes

Description: On the basis of the work already undertaken, the Senior Advisers will continue work with regard to policy measures for handling, control and discharge of toxic wastes.

Method of work: The Senior Advisers requested the secretariat to prepare preliminary studies outlining (i) what purpose would be served by establishing a list of toxic substances of priority concern within the ECE region, and (ii) possible guidelines for a book-keeping system, taking into account the work undertaken in this field by other international organizations. The Senior Advisers will examine, at their sixth session, what further action might be taken.

2 1978

05.4.1.4. Rehabilitation of derelict land

Description: Exchange of information will be organized on national experience in the reclamation of contaminated sites, including a review of existing reclamation techniques and their effectiveness. Consideration will also be given to alternative future use of the rehabilitated areas (recreation, building sites, etc.)

Method of work: A group of government-appointed experts would prepare documentation for consideration by the Senior Advisers.

[To be considered by the Senior Advisers at their sixth session.]

05.4.2. Environmental problems related to energy development

05.4.2.1. Environmental aspects of energy savings and conservation programmes

Description: The Senior Advisers will intensify their effort to ensure that, in ECE activities relating to increased energy economy and efficiency, environmental consequences are fully analyzed and taken into account.

Method of work: In order that the Senior Advisers may make an appropriate contribution to this project, they will be kept informed of ECE activities on the environmental implication of energy development.

cont.

Estimated duration (in years)	Estimated termination years
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05.4.2.2. Environmental aspects of energy production and use
with particular reference to new technologies

Description: The Senior Advisers on Environmental Problems will study, in close co-operation with the Senior Advisers on Science and Technology, the environmental aspects of new energy technologies, in order to provide information of possible assistance to Governments in decision-making on technological developments.

Method of work: The secretariat, with the guidance of the Senior Advisers, will continue to complete the study in progress, drawing, inter alia, upon authoritative information from other competent international organizations.

2

1978

WORK AREA 05.5: SELECTED PROBLEMS OF POLLUTION

05.5.1. Problems of air pollution

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

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

Method of work: The programme will be carried out under the auspices of the ECCE and form part of the Global Environmental Monitoring System of the UNEP. It will be implemented in co-operation with the World Meteorological Organization. The Programme will be supervised by a Steering Body made up of representatives from participating countries. The representatives of UNEP and the World Meteorological Organization will participate in the meetings. The Steering Body will be responsible for all matters related to the

Estimated duration (in years)	Estimated termination year
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effective implementation of the programme and will report annually to the Senior Advisers through its Working Party on Air Pollution Problems. The first phase of the programme will run from 1 January 1978 to 31 December 1980. The objectives, method of work and time-table for the implementation of the programme are further elaborated in the recommendations for the programme.

4 1980

05.5.1.2. Review and analysis of the existing situation and prospects with regard to the prevention of air pollution

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

Method of work: Each year, member Governments will prepare country statements according to agreed guidelines which will be provided by the Governments and circulated at every session of the Working Party in their original language (English, French or Russian) without translation. After the session, the secretariat will prepare a document incorporating the country statements in their original form, without translation.

cont.

05.5.1.3. Review and co-operation in the work done on air pollution problems by other ECE bodies and other international organizations working on these problems in the ECE region

Description: This is a continuing project with the aim of achieving the best possible co-ordination and co-operation in activities on air pollution problems. It should also avoid duplication and overlapping with the projects of various bodies and organizations.

Method of work: At each session, the secretariat presents a document describing the activity of ECE subsidiary bodies in the field of air pollution. International organizations are also invited to present their statements.

	Estimated duration (in years)	Estimated termination year
This information will help the Working Party to agree to appropriate action on projects and priorities for the implementation of the work programme to co-ordinate air pollution control activities among all interested groups.	cont.	
05.5.1.4. <u>Organization of a seminar on fine particulates</u>		
<u>Description:</u> The purpose of this project is to assess the magnitude and character of the problem of fine particulates, to evaluate existing technologies for measurement and collection of fine particulates, as well as to identify needs for research and development in this area.		
<u>Method of work:</u> A task force has been established consisting of experts from eleven countries. The report will include a literature review and assessment of current activities in this field. The results of the work of the task force will lead to a seminar to be held from 17 - 21 October 1977 in Austria.	4	1978
05.5.1.5. 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>Description:</u> Under the auspices of WHO/EURO and the ECE Working Party on Air Pollution Problems, a manual is being prepared which will cover the following pollutants: particulates, odours, SO ₂ and sulphates, NO _x , heavy metals, fluorides, hydrocarbons, oxydants and chlorines.		
<u>Method of work:</u> The first draft of the manual will be elaborated by the Association of Engineers of the Federal Republic of Germany (<u>Verein Deutscher Ingenieure (VDI)</u>). The draft will be reviewed by WHO experts and the Working Party on Air Pollution Problems. The comments and amendments will serve for the elaboration of a final version of the manual.	4	1979
05.5.1.6. Organization of a seminar on air pollution problems from the cement industry		
<u>Description:</u> The aim of this seminar is to examine recent achievements in air pollution control in the cement industry and to offer a background for future elaboration of guidelines for the control of emissions. The seminar will be organized in close co-operation with the Working Party on the Building Industry of the Committee on Housing, Building and Planning.		

Estimated duration (in years)	Estimated termination year
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Method of work: The papers for the seminar will be provided by the member countries of the ECE and international organizations. The detailed programme of the seminar will be elaborated at the preparatory meeting in 1978. The seminar will be organized by the ECE secretariat and the host country, if any.

1	1979
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05.5.1.7. Development of guidelines for the control of emissions from the non-ferrous metallurgical industries

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

Method of work: A task force has been established consisting of experts from eleven countries. First drafts of guidelines for the following processes are being prepared: primary aluminium, secondary aluminium, primary and secondary lead smelters, primary copper smelters, secondary copper smelters, zinc concentrate preparation, zinc smelting. The final version of the guidelines is expected to be ready by the end of 1978.

5	1979
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05.5.1.8. Development of guidelines for the control of emissions from the inorganic chemical industry

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

Method of work: A Task Force has been established to carry out the work.

2	1980
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05.5.1.9. Study on the problem of odours

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

	Estimated duration (in years)	Estimated termination year
<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.	3	1981
05.5.1.10. Organization of a third seminar on the desulphurization of fuels and combustion gases		
<u>Description:</u> A third seminar on the desulphurization of fuels and combustion gases will be organized by the Working Party on Air Pollution Problems. However, the exact year will be decided later according to progress made in desulphurization technology. The seminar may be postponed until after 1981 if there are no evident changes in the techniques. It is expected to repeat this seminar in the future.		
<u>Method of work:</u> Co-operation between the Working Party and the Committee on Electric Power will be ensured by the secretariat. The organization of the seminar will be in the hands of the secretariat and the host country, if any.	1	1981
05.5.1.11. Organization of a seminar on air pollution problems from specific branches of the organic chemical industry		
<u>Description:</u> The aim of this seminar is to examine recent achievements in air pollution control in the production of halogenated hydrocarbons and chemicals for biocides. The results of the seminar will serve as a background for the future elaboration of guidelines for the control of emissions. The seminar will be organized in close co-operation with the Chemical Industry Committee.		
<u>Method of work:</u> The papers for the seminar will be provided by the member countries of the ECE and international organizations. The detailed programme of the seminar will be elaborated at a preparatory meeting in 1977. The seminar will be organized by the ECE secretariat and the host country, if any.		
05.5.2. <u>Environmental aspects of water pollution</u>		
05.5.2.1. Protection of the marine environment, in particular in the Mediterranean Sea		
<u>Description:</u> This project will focus on the broad problems of the marine environment.		

Estimated duration (in years)	Estimated termination year
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Method of work: It is proposed that the Senior Advisers decide upon the method of implementation at their sixth session.

[To be considered by the Senior Advisers at their sixth session].

05.5.3. Problems of noise

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

Method of work: A task force, with the United States as lead country, has been established and has held two meetings. Nine countries have provided background information on a number of agreed topics, and a synthesis paper has been prepared. At a later stage, a seminar on this subject may be organized.

3 1979

WORK AREA 05.6: STATISTICS, INFORMATION AND NORMS

05.6.1. Collection of statistics and relevant information

05.6.1.1. System of environmental statistics

Description: Study of the statistical requirements for environmental studies and policies; participation in the work of the United Nations Statistical Commission on the development of a system of environmental statistics; elaboration of the concepts, definitions and descriptions to be used for the study of particular environmental phenomena and for the purposes of the system as a whole (jointly with the Conference of European Statisticians).

Method of work: The Senior Advisers will convene, jointly with the Conference of European Statisticians, an ad hoc meeting of experts in 1978 and will strengthen and intensify their collaboration especially through inter-secretariat contacts and exchange of documentation.

Estimated duration (<u>in years</u>)	Estimated termination <u>year</u>
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05.6.1.2. Indicators for the evaluation of the quality
of the environment

Description: The Senior Advisers will undertake a comparative study of different concepts related to indicators of environmental quality, in order to develop a system of such indicators. The work will take into account, inter alia, the results of the work on project 05.6.1.1.

Method of work: The task force, headed by Yugoslavia, will continue its activities in close co-operation with other international organizations which have activities in this field.

3	1979
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05.6.2. Harmonization of environmental protection
standards and norms

05.6.2.1. Study of the use of emission and immission
standards in pollution control

Description: Work will be undertaken on the practical use of emission and immission standards in establishing pollution control measures. The study will consider also international comparison of such standards as well as their harmonization.

Method of work: The work will be carried out by government experts or possibly by a task force, which would select industries and/or products for possible study.

[To be considered by the Senior Advisers at their
sixth session.]

06. - ELECTRIC POWER

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

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

Description: The Committee will examine once every three years the medium- 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 options for 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. A preliminary report will be prepared by the secretariat on the basis of the findings of the Symposium held in Greece in May 1975 and of further information on the subject supplied by Governments. A symposium might be scheduled for 1978-1979.

cont.

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

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

Method of work: A report prepared by the government rapporteurs from Poland, on the basis of information supplied by the ECE countries and by CMEA, UCPTE, NORDEL and the Central Dispatching Office of the Unified Power Systems (Prague), will be submitted to the Group of Experts on Problems of Planning and Operating Large Power Systems at its 1977 session.

1

1977

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 developments in rural areas.

	Estimated duration (in years)	Estimated termination year
<u>Method of work:</u> 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.	3	1979
06.1.4. <u>Optimum future structure of the European transmission system</u>		
<u>Description:</u> The purpose of this project is to examine the economic efficiency and define the basic aspects of the future structure of the European interconnected transmission system in terms of the period up to 1990, using the economic criteria and methods adopted by the Committee.		
<u>Method of work:</u> The method of work will be decided on by the Committee at a future session.	2	1980
06.1.5. <u>Co-operation with the Senior Economic Advisers to ECE Governments on the Overall Economic Perspective for the ECE Region up to 1990</u>		
<u>Description:</u> The Committee will consider and comment on the Overall Economic Perspective for the ECE Region as envisaged by the Senior Economic Advisers and draw their attention to the results of its own work in this field.		
<u>Method of work:</u> The secretariat will prepare the necessary documentation for the Committee's consideration and assist it in its work.	2	1978
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 facing Governments in the field of investment in the electric power industry and related policy alternatives, taking into account newly arising economic conditions.		
<u>Method of work:</u> The secretariat, after consulting Governments, will initially deal with selected aspects of this subject in the study which it is to prepare in 1977 on the medium- and long-term prospects for the electric power industry in the ECE region.	3	1980

Estimated duration (in years)	Estimated termination year
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WORK AREA 06.2: CURRENT DEVELOPMENTS

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

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

Method of work: The secretariat will collect the requisite information from Governments and publish it in the periodic reports referred to under 06.2.1.1, 06.2.1.2 and 06.2.1.3. An informal meeting of the government rapporteurs from Belgium, the Byelorussian SSR, France and the Federal Republic of Germany will be held in February 1977 in order to work out the new structure for the review referred to under 06.2.1.3.

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. Triennial review of the state of rural electrification in the ECE region

06.2.2. Examination of opportunities for industrial co-operation in electric power production

Description: The Committee will examine the possibilities of promoting industrial co-operation in its sphere of activity.

Method of work: The secretariat will keep the Committee informed of the relevant work of the other Principal Subsidiary Bodies concerned, in particular the Committee on the Development of Trade, and co-operate with them as appropriate.

2

1979

06.2.3. Selected statistical problems

Description: The Committee will, at its annual sessions, examine questions related to the content and presentation of the periodic bulletins of electric energy statistics as well as the definitions and the units employed.

	Estimated duration (in years)	Estimated termination year
<u>Method of work:</u> The Committee will select problems for detailed examination in co-operation with the Conference of European Statisticians. Reports will be prepared by the secretariat for the following project components:		
	cont.	
06.2.3.1. Choice of unit of measurement used for heat	1	1977
06.2.3.2. Value of the thermal equivalent of the kilowatt-hour to be used in energy balance sheets	1	1977
06.2.4. <u>Preparation of a terminology suited to the needs of the Committee on Electric Power</u>		
<u>Description:</u> The Committee will prepare a terminology in English, French and Russian containing the most important terms used in the field of electric power production and transmissions, including terms used in electric power statistics.		
<u>Method of work:</u> The terminology will be prepared by the secretariat on the basis of the terminologies published by the following international organizations: CMEA, IEC, UCPTE, UNIPEDIE, WEC. An <u>ad hoc</u> meeting of experts will be convened in 1977 to consider this project. The secretariat will prepare the necessary documentation.		
	2	1978
06.2.5. <u>Problems raised by international standardization in the field of electric power</u>		
<u>Description:</u> The Committee and its subsidiary bodies will, at their sessions, examine subjects for which international standards should be elaborated.		
<u>Method of work:</u> The subjects selected will be transmitted, through the Meeting of Government Officials Responsible for Standardization Policies, to the International Electrotechnical Commission (IEC).		
	cont.	
<u>WORK AREA 06.3: SELECTED TECHNOLOGICAL AND ECONOMIC PROBLEMS</u>		
06.3.1. <u>Selected problems of conventional thermal power stations equipped with steam or gas turbines</u>		

Description: The purpose of this project is to promote technology transfer through an exchange of information and experience on selected problems of conventional 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	1981
06.3.1.1 (a). Experience gained in the operation of units having a rated capacity of 200 MW or above at thermal power stations		
<u>Method of work:</u> A report will be prepared by government rapporteurs from Poland on the basis of information transmitted by ECE countries, in co-operation with the government rapporteurs from the Federal Republic of Germany and with UNIPED and UCPTE.	2	1978
0.6.3.1.1 (b). Experience gained in the operation of units having a rated capacity of 200 MW or above at nuclear power stations		
<u>Method of work:</u> A report will be prepared by government rapporteurs from the Federal Republic of Germany on the basis of information transmitted by ECE countries, in co-operation with the government rapporteurs from Poland and with UNIPED and UCPTE.	2	1978
06.3.1.2. Problems concerning the design, production and operation of high-capacity thermal power units which use different types of fuel, are highly manoeuvrable and can be used to cover the half-peak of the load curve		
<u>Method of work:</u> A report will be prepared by government rapporteurs from the USSR on the basis of information transmitted by ECE countries.	3	1979
06.3.1.3. Principles adopted in different countries for the definition of statistical indexes of operational performance in electric power and heat production		
<u>Method of work:</u> A report will be prepared by government rapporteurs from Romania on the basis of information transmitted by ECE countries.	2	1978
06.3.1.4. Utilization of low-calorie fuels		
<u>Method of work:</u> The Group of Experts on Electric Power Stations will determine the method of work in the light of the results of the Seminar held on this topic in Bulgaria in April 1976.	2	1978

	Estimated duration (in years)	Estimated termination year
06.3.1.5. Recommended methods for improving the availability of large units at thermal power stations		
<u>Method of work:</u> A report will be prepared by government rapporteurs from Belgium on the basis of information transmitted by ECE countries.	3	1979
06.3.1.6. Problems concerning the design, equipment and operation of installations for the extraction and discharge of ash on a dry basis at thermal power stations using solid fuel		
<u>Method of work:</u> A report will be prepared by government rapporteurs from Czechoslovakia and Yugoslavia on the basis of information transmitted by ECE countries	3	1979
06.3.1.7. Use of dry cooling towers at conventional thermal power stations and nuclear power stations		
<u>Method of work:</u> A report will be prepared by government rapporteurs from Hungary on the basis of information transmitted by ECE countries.	3	1979
06.3.2. <u>Selected problems of hydroelectric schemes</u>		
<u>Description:</u> The purpose of this project is to promote technology transfer through an exchange 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 as indicated under each project component below.	3	1979
06.3.2.1. Methodological principles for optimizing the commissioning date of pumped-storage power stations in mixed electric power systems under development		
<u>Method of work:</u> A preliminary report on this subject will be prepared jointly by government rapporteurs from Czechoslovakia and Yugoslavia.	2	1978

Estimated duration (in years)	Estimated termination year
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06.3.2.2. Methods of evaluating the economic effectiveness of conventional hydroelectric and pumped-storage power stations used to cover the variable part of the load curve, with a view to optimizing their operation

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

2	1978
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06.3.3. Problems involved in the integration of nuclear power stations, including breeder reactors, in electric power systems and economic features of their use (in co-operation with IAEA)

Description: The purpose of this project is to develop an exchange of experience and views on nuclear power station technology and related economic, operational and other problems.

Method of work: The project will be implemented by the Group of Experts on Electric Power Stations, as indicated under each project component below.

4	1980
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06.3.3.1. Use of nuclear power stations for the combined production of thermal energy and heat

Method of work: A preliminary report on this topic will be prepared by government rapporteurs from France. An ad hoc meeting of experts will be organized on the subject in September 1977.

2	1978
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06.3.3.2. Methods used in training personnel for new nuclear power stations

Method of work: A preliminary report on this subject will be prepared by government rapporteurs from France.

2	1978
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06.3.3.3. Economic problems involved in integrating large-capacity power stations, in particular nuclear power stations, into electric power systems

Method of work: The project will be implemented by the Group of Experts on Electric Power Stations in co-operation with the Group of Experts on Problems of Planning and Operating Large Power Systems, in accordance with the assignments given them by the Committee. The secretariat will co-operate on this project with IAEA in connexion with the International Conference on Nuclear Power

	Estimated duration (in years)	Estimated termination year
and its Fuel Cycle, to be organized by IAEA at Salzburg (Austria) in May 1977, and will report on the Conference to the Group of Experts on Electric Power Stations in the light of the comments made by the Committee.	4	1980
<u>06.3.4. Selected problems of distribution of electric power in rural areas</u>		
<u>Description:</u> The purpose of this project is to promote technology transfer through an exchange of information and experience on selected problems of electricity distribution in rural areas.		
<u>Method of work:</u> The project will be implemented by the Group of Experts on Distribution and Rural Electrification as indicated under each project component below.	3	1979
<u>06.3.4.1. The increase of the electricity use in the rural sector and its effect on the development of distribution networks.</u>		
<u>Method of work:</u> A report will be prepared jointly by government rapporteurs from Poland and USSR on the basis of information transmitted by the ECE countries.	3	1979
<u>06.3.4.2. Distribution by underground and overhead networks in rural areas</u>		
<u>Method of work:</u> A report will be prepared jointly by government rapporteurs from Hungary and USSR on the basis of information transmitted by the ECE countries.	3	1979
<u>06.3.5. Production of electric power in island countries</u>		
<u>Description:</u> The purpose of this project is to facilitate and accelerate the transfer of technology 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.		
<u>Method of work:</u> The project will be implemented by the Group of Experts on Electric Power Stations. A consolidated paper will be prepared by government rapporteurs from Greece.	3	1979
<u>06.3.6. Load-curve coverage in future electric power systems</u>		
<u>Description:</u> The purpose of the project is an exchange of information and data, both economic and technical, on new problems arising from load-curve coverage in future electric power systems.		

Estimated duration (in years)	Estimated termination year
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Method of work: A symposium will be held on this topic in Italy from 10-14 October 1977. A preparatory meeting will be convened in February 1977.

1	1977
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06.3.7. Economic and technical problems of the use of waste heat from power stations, including transport over long distances

Description: The purpose of this project is to promote technology transfer through an exchange of information and experience on selected problems concerning the use of waste heat from power stations, the combined production of heat and electricity and the transport and distribution of heat. The project is related to the seminar to be held in 1978 pursuant to operative paragraph (c)(ii) of Commission decision G (XXI).

Method of work: The Committee will prepare its contribution to the above seminar for presentation at the ad hoc meeting to be held in March 1977. The project will be implemented through the Group of Experts on Electric Power Stations and the Group of Experts on the Relationship between Electricity and the Environment. A report will be prepared on project component 06.3.7.2 by government rapporteurs from the Federal Republic of Germany.

3	1979
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06.3.7.1. Utilization of waste heat from conventional thermal and nuclear power stations

3	1979
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06.3.7.2. Economic and technical problems involved in the long-distance transport of heat produced by combined-production thermal power stations

1	1977
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WORK AREA 06.4: INTERCONNECTION OF ELECTRIC POWER TRANSMISSION SYSTEMS

06.4.1. Economic criteria and methods for determining the choice of solutions to interconnexion problems

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

	Estimated duration (in years)	Estimated termination year
<p><u>Method of work:</u> At its 1977 session, the Group of Experts on Problems of Planning and Operating Large Power Systems will make a final decision concerning the choice of methods on the basis of the reports submitted by several ECE countries. An informal meeting of government rapporteurs from France, Italy, Romania and the USSR will be held in February 1977.</p>	1	1977
<p>06.4.2. <u>Economic and technical problems involved in the interconnexion of the electric power transmission systems of the Balkan countries</u></p> <p><u>Description:</u> The purpose of this project is to facilitate the interconnexion of the electric power transmission systems of the Balkan countries.</p> <p><u>Method of work:</u> The Committee will be kept informed of the progress of work on the matter, and in particular of the results of the sessions of the Co-ordinating Committee set up by the Governments of Bulgaria, Greece, Romania, Turkey and Yugoslavia to deal with problems arising in the development of interconnexions among these countries. The Group of Experts on Problems of Planning and Operating Large Power Systems and the secretariat will be available to assist the Co-ordinating Committee in its work.</p>	3	1979
<p>06.4.3. <u>Consideration of possibilities for the development of transfers of electric power across frontiers and by relay</u></p> <p><u>Description:</u> The purpose of the project is to promote international interconnexions among Central European systems.</p> <p><u>Method of work:</u> A report will be prepared by government rapporteurs from Czechoslovakia on the technical and financial problems raised by these interconnexions.</p>	1	1977
<p>06.4.4. <u>Economic and technical problems involved in the interconnexion of the electric power transmission systems of the countries of eastern and western Europe by means of very long high-voltage transmission lines</u></p> <p><u>Description:</u> The purpose of the project is to explore the possibilities of interconnecting the electric power transmission systems of the countries of eastern and western Europe by means of very long high-voltage transmission lines.</p>		

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

3	1981
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06.4.5. Preparation of a map of high-voltage electric power networks

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

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

cont.

WORK AREA 06.5: PROBLEMS OF IMPROVING EFFICIENCY

06.5.1. Rationalization of electricity use by consumers

Description: The purpose of this project is to promote, through an exchange 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, government rapporteurs from France and Romania will prepare reports for project components 06.5.1 and 06.5.1.2 respectively.

3	1979
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06.5.1.1. The effect of measures for rationalizing energy use on the development of electricity consumption in rural areas

3	1979
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06.5.1.2. Research into the scope and methods for improving energy use through the distribution of electricity in areas of low load density

3	1979
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	Estimated duration (in years)	Estimated termination year
06.5.2. <u>Measures designed to save fuel in heat and electric power production</u>		
<u>Description:</u> The purpose of this project is to identify the possibilities and limitations of measures intended to save fossil fuels in electric power and heat production, as well as at the consumer level.		
<u>Method of work:</u> The project will be implemented by the Group of Experts on Electric Power Stations and other subsidiary bodies of the Committee, as indicated under each project component below.	2	1978
06.5.2.1. Economic conditions and technological procedures for measures designed to save fuel in electric power and heat production; future prospects		
<u>Method of work:</u> A report will be prepared by government rapporteurs from Romania on the basis of information transmitted by Governments.	2	1978
06.5.2.2. Gradual substitution of nuclear electricity for fossil fuels at the consumer level		
<u>Method of work:</u> A study will be prepared by government rapporteurs from France, Italy and Sweden in co-operation with the European Economic Community.	2	1978
06.5.3. <u>Evaluation of the hydroelectric potential in Europe</u>		
<u>Description:</u> The purpose of the project is to promote the use of the hydroelectric potential now becoming economically viable because of increased energy prices.		
<u>Method of work:</u> The project will be implemented by the Group of Experts on Electric Power Stations, where necessary in co-operation with the Committee on Water Problems. A consolidated report will be prepared by government rapporteurs from Spain and Greece on the basis of information received from ECE countries.	1	1977
06.5.4. <u>Utilization of geothermal energy for the production of electric power and thermal energy</u>		
<u>Description:</u> The project consists of a review of geothermal resources and technologies used for the production of electricity and heat from geothermal sources.		

	Estimated duration (in years)	Estimated termination year
<u>Method of work:</u> A symposium will be organized by the Committee on this subject.	2	1982
<u>WORK AREA 06.6: ENVIRONMENTAL PROBLEMS</u>		
<u>06.6.1. Selected problems concerning the relationship between electricity and the environment</u>		
<u>Description:</u> The Committee will undertake an exchange of views and experience on the technical and economic aspects of environmental problems relating to the production, transmission and distribution of electric power and means of solving them.		
<u>Method of work:</u> The project will be implemented, where necessary in co-operation with the Senior Advisers to ECE Governments on Environmental Problems, by the Group of Experts on the Relationship between Electricity and the Environment, as indicated under each project component below.	3	1979
06.6.1.1. Effects of thermal discharges from electric power stations into watercourses and reservoirs and regulations in force in various countries		
<u>Method of work:</u> A report will be prepared by government rapporteurs from the USSR on the basis of information transmitted by ECE Governments.	3	1979
06.6.1.2. Effects of polluted water on the cooling systems of thermal power stations		
<u>Method of work:</u> A report will be prepared by government rapporteurs from Poland on the basis of information transmitted by ECE Governments.	3	1979
06.6.1.3. International comparison of standards concerned with methods of calculating, measuring and monitoring pollution caused by electric power stations		
<u>Method of work:</u> The secretariat will prepare a paper concerning ECE activities on this subject.	2	1978

	Estimated duration (in years)	Estimated termination year
06.6.1.4. The contribution of electric power and its development to the improvement of the environment		
<u>Method of work:</u> A report will be prepared by government rapporteurs from Belgium, France and Poland on the basis of information transmitted by ECE Governments.	2	1978
06.6.1.5. Environmental aspects of the cooling systems of thermal power stations		
<u>Method of work:</u> The Group of Experts will decide on the method of work at its sixth session.	2	1979
06.6.1.6. Economic and ecological comparisons between sources of energy (electricity, gas, district heating etc.) used for urban and industrial heating and for technological purposes		
<u>Method of work:</u> The secretariat will prepare a paper concerning ECE activities on this subject.	3	1979
06.6.1.7. Biological effects of the electromagnetic field of ultra-high-voltage power lines		
<u>Description:</u> The purpose of this project is to gather information on the biological effects which might occur near ultra-high-voltage power lines.		
<u>Method of work:</u> The Group of Experts on the Relationship between Electricity and the Environment will be informed by the secretariat of the work done on this subject by various international organizations.	1	1977
06.6.2. <u>Integration of electricity production, transmission and distribution installations into the environment</u>		
<u>Description:</u> The purpose of the project is to promote the exchange of information and experience on problems concerning the integration of electric power installations into the environment and to give the public objective information about these problems.		
<u>Method of work:</u> Details are given under each project component below.	2	1978

	Estimated duration (in years)	Estimated termination year
06.6.2.1. Public information on the integration of electricity production, transmission and distribution installations into the environment		
<u>Method of work:</u> This project will be implemented by the Group of Experts on the Relationship between Electricity and the Environment in co-operation with the Senior Advisers to ECE Governments on Environmental Problems, especially in connexion with their project on evaluating impact on the environment.	2	1978
The following three public information booklets will be prepared:		
(a) Electric power networks (by government rapporteurs from France, the United Kingdom and the USSR)	1	1977
(b) Visual amenities of electric power stations (by government rapporteurs from Czechoslovakia, Finland and the United Kingdom)	2	1978
(c) Nuclear power and the environment (by government rapporteurs from France, Spain and possibly one more country in co-operation with IAEA)	2	1978
06.6.2.2. Integration of electricity distribution installations into the environment		
<u>Method of work:</u> A report prepared by government rapporteurs from Finland on the basis of information communicated by countries will be submitted to the Group of Experts on Distribution and Rural Electrification.	3	1979
06.6.3. <u>Impact of desulphurization policies on electric power production</u>		
<u>Description:</u> Following the results of the Second Seminar on the Desulphurization of Fuels and Combustion Gases, held in Washington (United States of America) in November 1975, work is proceeding on selected aspects of the reduction of sulphur dioxide emissions from large thermal power stations.		
<u>Method of work:</u> The project is being implemented by the Group of Experts on the Relationship between Electricity and the Environment in co-operation with the Senior Advisers to ECE Governments on Environmental Problems. A report is being prepared by government rapporteurs from Belgium.	1	1977

07. - GAS

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

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

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

Method of work: A Symposium About the Gas Situation in the ECE Region Around the Year 1990-2000 will be held in France in the autumn of 1978. The programme of the Symposium will be determined at the Preparatory Meeting to be convened on 4-5 April 1977.

1

1978

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: This project will be given due consideration at the Symposium About the Gas Situation in the ECE Region Around the Years 1990-2000, to be held in the autumn of 1978. The Committee on the Development of Trade will be informed of the outcome of the work in connexion with this project.

1

1978

07.1.3. Co-operation with the Senior Economic Advisers to ECE Governments on the Overall Economic Perspective for the ECE Region up to 1990

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

<u>Estimated</u> <u>duration</u> <u>(in years)</u>	<u>Estimated</u> <u>termination</u> <u>year</u>
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Method of work: The Group of Experts on Gas Statistics and Forecasting Problems will review a summary of the study to be prepared on behalf of the Committee.

2 1978

WORK AREA 07.2: CURRENT DEVELOPMENTS AND PROSPECTS, INCLUDING TRADE

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

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

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

cont.

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

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

Method of work: The Committee will consider these problems in connexion with its analysis of the gas situation and gas markets. This project will also be considered at the Symposium About the Gas Situation in the ECE Region Around the Years 1990-2000, to be held in 1978.

cont.

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

Method of work: The Group of Experts on the Use and Distribution of Gas will carry out studies undertaken on the use of gas in selected sectors. Regarding sub-topic (a) government contributions, as well as contributions made by the European Economic Community (GAS/R.30) will be considered. Regarding sub-topic (b), the Group of Experts will consider initiating a study on the use of gas in thermal power plants and identify problem areas requiring co-operation with the Electric Power Committee.

cont.

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

Description: The Committee will examine the use of LNG installations for peak-shaving purposes and for serving remote areas, with a view to exchanging experience and promoting a wider use of this technique. Special attention will be paid to technical and economic prospects for the transportation of LNG to peak-shaving plants rather than resorting to local liquefaction of pipeline gas.

Method of work: The Group of Experts on Transport and Storage of Gas will examine papers on the subject to be submitted by the delegation of the Netherlands and the representative of the European Economic Community. The Government of the United States will confirm whether or not a study tour or a seminar will be organized on LNG facilities for peak-shaving facilities in that country.

	<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
07.3.3. <u>Revision of the Map of European Gas Transmission Networks and the International Map of Natural Gas Fields in Europe</u>		
<u>Description:</u> The Committee will proceed with the revision of the Maps of European Gas Transmission Networks and the International Map of Natural Gas Fields in Europe.		
<u>Method of Work:</u> Revision of the Map of European Gas Transmission Networks will be carried out with the help of the Government of Hungary on the basis of updated information supplied by ECE Governments, if possible, by the end of 1978. The revision of the International Map of Natural Gas Fields in Europe will take place in two years' time.	3	1980
07.3.4 <u>Problems in management of international gas pipelines</u>		
<u>Description:</u> The Committee will study basic principles involved in despatching in international gas pipeline systems management.		
<u>Method of work:</u> A government rapporteur designated by the USSR will prepare a paper to initiate the study on "Basic principles of managing international gas pipelines (despatching)". The Group of Experts on the Transport and Storage of Gas will deal with this project.	3	1980
07.3.5. <u>Development of underground gas storage facilities</u>		
<u>Description:</u> The Group of Experts on the Transport and Storage of Gas will study various aspects of underground storage of gas and related problems.		
<u>Method of work:</u> Government rapporteurs to be designated by Belgium, Czechoslovakia, France, Federal Republic of Germany and the USSR will draft a report based on contributions received from countries.	4	1980
07.3.6. <u>Harmonization of codes of good practices, technical rules and regulations and standards of gas equipment and appliances</u>		
<u>Description:</u> The Committee will consider possibilities of harmonizing codes of good practices, technical rules and regulations and standards of gas equipment and appliances. The purpose of this work is to alleviate		

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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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. Specific problems in this field will be selected by the Committee for detailed examination.

Method of work: The International Gas Union will report to the Committee, at its next session, on related work in this field carried out elsewhere.

cont.

07.3.7. Maintenance problems in gas transport systems

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

Method of work: The Group of Experts on Transport and Storage of Gas will consider the consolidated report on the topic "Technical and economic aspects of the internal lining of pipelines", prepared by a government rapporteur from the Federal Republic of Germany. It is expected that, at its eighth session, the Group of Experts will release this document for general distribution.

2

1978

07.3.8. Load factor of transport and distribution systems

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

Method of work: The paper prepared by the Government of Hungary on "Definitions of some concepts in the gas industry (GAS/GE.2/R.13)" has been transmitted to the IGU for consideration and comments.

2

1978

The government rapporteur designated by the USSR will prepare a preliminary consolidated paper on "Economic and technical pre-requisites for the determining of the load factor of gas transport pipelines".

3

1979

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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07.3.9. Selected research and development problems

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

Method of work: The Meetings of Directors of Research Institutes or Centres of the Gas Industry will be convened as appropriate in order to assist the Committee in the selection of problems for study. The next Meeting will be convened in 1978. This meeting will be held outside Geneva, in a country which accepts to host it.

cont.

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) the possibility of using hydrogen in existing gas transport and distribution facilities in future, (b) problems of ensuring the compatibility of natural gases of different characteristics and from different sources.

Method of work: As regards project component (a), at its eighth session, the Group of Experts on the Use and Distribution of Gas will consider replies to be received from the Government of the Netherlands to the questions put concerning the document "Hydrogen in the Energy System of the Netherlands, a possibility for the future", a summary of the exploratory study made by a special studies group in the Netherlands.

1	1977
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As regards project component (b) the government rapporteur from Belgium will prepare a paper on compatibility problems of natural gas of different characteristics and from different source areas for consideration by the Group of Experts on the Use and Distribution of Gas at its eighth session.

2	1978
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<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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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 and storage of gas. At present, the Group of Experts on Transport and Storage of Gas considers (a) sea pipelines for the transport of gas, (b) economic aspects of the transportation of cooled gas (up to $-70^{\circ}\text{C}.$).

Method of work: As regards project component (a), the Group of Experts on the Transport and Storage of Gas will consider organizing a seminar to discuss new problems of off-shore technology and sea pipelines in three years' time.

4	1980
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As regards project component (b), the government rapporteur designated by the USSR will prepare a paper on the economic aspects of the transportation of cooled gas by pipelines.

3	1980
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07.3.9.3. 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: The Group of Experts on Natural Gas Resources will consider convening a seminar on geological and geophysical methods of prospecting for gas in ECE countries.

3	1980
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07.3.10. Production and use of substitute natural gas

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

	<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
<p><u>Method of work:</u> A Symposium on Gasification and Liquefaction of Coal will be organized by the Coal Committee in Poland in 1978/1979, at which the Committee will participate. Gas experts will participate in the <u>ad hoc</u> Meeting of Experts to consider details of intensified co-operation on selected R and D projects in the field of coal gasification, liquefaction and treatment, and to draw up a list of subjects most appropriate for such co-operation, to be held in February 1977.</p>	3	1981
<p>07.3.11. <u>Natural gas transport over long distances by pipelines of large diameter</u></p>		
<p><u>Description:</u> The Group of Experts on the Transport and Storage of Gas will study the economic and technical aspects of the transportation of huge amounts of gas over pipelines of large diameters for very long distances.</p>		
<p><u>Method of work:</u> A government rapporteur from the USSR will prepare a paper to clarify and define the scope of the study so as to facilitate its consideration by the Group of Experts on the Transport and Storage of Gas at its eighth session.</p>		
	3	1980
<p>07.3.12. <u>Gas storage to ensure continuity in gas supplies in case of interruption through natural or technical hazards</u></p>		
<p><u>Description:</u> The Committee on Gas will carry out a study on storage needs to improve reliability of gas supplies.</p>		
<p><u>Method of work:</u> The Chairman and Vice-Chairman of the Committee will consider those aspects of the subject matter which the Group of Experts on the Transport and Storage of Gas will study.</p>		
	4	1980
<p>07.3.13. <u>Exploitation of natural gas resources</u></p>		
<p><u>Description:</u> The Committee will select problems for detailed study regarding the exploitation of natural gas resources. At present, the Group of Experts on Natural Gas Resources considers:</p>		
<p>(a) compilation of a glossary on natural gas resources and the economy of their exploitation;</p>		
<p>(b) collection and publication of statistical data on the recovery factor.</p>		

	<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
<p><u>Method of work:</u> Regarding project component (a), the Group of Experts on Natural Gas Resources at its second session, will consider the preliminary glossary on natural gas resources and the economy of their exploitation, prepared by the government rapporteur from the Federal Republic of Germany assisted by government rapporteurs from Bulgaria, France, Netherlands, the Ukrainian SSR, the USSR and the United Kingdom.</p>	2	1978
<p>Regarding project component (b), a government rapporteur designated from the USSR will draft a consolidated paper.</p>	2	1978
<p><u>WORK AREA 07.4: ENVIRONMENTAL PROBLEMS</u></p>		
<p><u>07.4.1. The gas industry and environment</u></p>		
<p><u>Description:</u> 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.</p>		
<p><u>Method of work:</u> A Symposium on the Gas Industry and Environment will be held in Minsk, (Byelorussian SSR) from 20-27 June 1977. At this Symposium in-depth discussions will be held on the following themes: (a) the utilization of natural gas in industry, energy production, agriculture and environmental protection; (b) the use of gas in communal (commercial), domestic sectors and environmental protection; (c) problems of environmental protection with regard to exploration, exploitation, preparation, transportation, storage and distribution of natural gas; (d) the production, distribution and use of manufactured gases (town gas and substitute natural gas) and relevant environmental problems. The Senior Advisers to ECE Governments on Environmental Problems and the International Gas Union are invited to participate in this Symposium.</p>	1	1977

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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07.4.2. Environmental problems in exploration, exploitation, transportation, storage and distribution or use of gas

Description: The Committee will study the environmental problems in the exploration, exploitation, transportation, storage and distribution of gas.

Method of work: The Committee might wish to await the outcome of the Symposium on the Gas Industry and Environment, to be held in Minsk, (Byelorussian SSR) from 20-27 June 1977, before taking a decision regarding follow-up work.

3	1980
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WORK AREA 07.5: EFFICIENCY AND CONSERVATION

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

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

Method of work: As regards project component (a), the Group of Experts on the Use and Distribution of Gas, at its eighth session, will consider a "Consolidated report on the rational use of gas in the various sectors of the economy and relevant conservation ethics", prepared by the government rapporteur from the USSR, assisted by government rapporteurs from Belgium and the United Kingdom.

3	1979
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Concerning project component (b), the representative of the European Economic Community will prepare a paper on the effect of gas supply and rational use of gas in the various sectors of the economy.

1	1977
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<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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As regards project component (c), the government rapporteur from Romania drafted a questionnaire on "Recuperation of heat in combustion products of industrial installations using natural gas". It will be considered by the Group of Experts and then used to initiate the study.

2	1978
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Regarding project component (d), the Group of Experts on the Use and Distribution of Gas, at its eighth session, will consider the paper "Establishment of a priority list for natural gas consumption in the various sectors of the economy so as to obtain maximum yield", prepared by the government rapporteur from the Federal Republic of Germany, assisted by government rapporteurs from Belgium, Hungary and Romania.

2	1978
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07.5.2. Exploitation of natural gas, stimulation and enhanced recovery techniques, methods to reduce waste of associated gas in oil production

Description: The Committee will study

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

Method of work: The Committee will assist the Commission through the contribution of member countries of the ECE to the ad hoc meeting or seminar on improved techniques for extraction and processing of primary forms of energy (Commission decision G (XXXI)). The Committee will consider the conclusions of that ad hoc meeting or seminar at its following session. It will then decide how it can best contribute to further work on these subjects.

3	1980
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<u>Estimated</u> <u>duration</u> <u>(in years)</u>	<u>Estimated</u> <u>termination</u> <u>year</u>
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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 the contents of the Annual Bulletin of Gas Statistics in order to assist the Conference of European Statisticians in collecting internationally-comparable statistical data.

cont.

07.6.2. Development and improvement of statistical information

Description: The Committee, together with the Conference of European Statisticians where necessary, will select problems for detailed examination in order to develop and improve international statistics in the field of the gas industry. At present, the Group of Experts on Gas Statistics and Forecasting Problems considers: (a) questions arising from the gradual transition to the international system of units (the SI Units) in many countries; (b) the international comparison of ratios within the gas industry; (c) harmonization of questionnaires (circulated by various international bodies in the field of gas statistics), especially definitions used and their presentation; (d) additional data to be collected on a regular basis for inclusion in the gas bulletins (survey of the additional data requirements in countries and by various international bodies); (e) technical problems related to "Overall balance sheets of energy" (co-operation possibilities with the other Principal Subsidiary Bodies of the ECE that deal with energy); (f) elaboration of flow diagrams; (g) collection of data on underground gas-storage and LNG peak-shaving facilities; (h) collection of data on gas transport mains classified according to their internal diameters and, the Group of Experts will study forecasting problems.

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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The Group of Experts on Natural Gas Resources collects and examines statistical data on estimates of natural gas reserves.

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), (g), and (h). It will also study problems arising in the field of forecasting gas demand. The Group of Experts on Natural Gas Resources will collect "Statistical data on estimates of natural gas reserves" and will consider them at its annual sessions.

cont.

07.6.3. Information on investments in the gas industry including financing

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

Method of work: The Committee will (a) collect data on investments and financing requirements of the gas industry every year and (b) initiate a study on depreciation practices and schemes.

With regard to the sub-project (a), collection of data on investments, a government rapporteur designated from the Federal Republic of Germany will draft a consolidated report, making use of data collected for the consideration of the Committee at its twenty-fourth session.

cont.

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With regard to sub-project (b), the study on depreciation practices and schemes, the Governments of the Federal Republic of Germany and the USSR will submit papers on depreciation practices in their countries, which would be used in elaborating a questionnaire to collect the necessary information to initiate a study. A government rapporteur from the Federal Republic of Germany will be designated to draft a report on the subject, making use of information collected. The consolidated report will be considered by the Committee at its twenty-fourth or twenty-fifth session.

2

1979

Government experts participating in the work of the ad hoc Meeting will contribute to the Symposium About the Gas Situation in the ECE Region Around the Years 1990-2000, to be held in 1978, and will take part in the relevant preparatory meeting.

08. - HOUSING, BUILDING AND PLANNING

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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WORK AREA 08.1: LONG-TERM PERSPECTIVES AND POLICIES IN HUMAN SETTLEMENTS

08.1.1. Major long-term trends in housing policies

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

Method of work: The project will be implemented both through a seminar and a study. The former will be limited in scope, covering three themes for each of which discussion papers will be prepared by rapporteurs. The study will be more comprehensive and include a broader evaluation of problems and policies; it will be elaborated by rapporteurs in consultation with the secretariat. The seminar will be held in Finland in July 1977; the seminar proceedings will be prepared and published by the secretariat. The study will be finished early in 1978, submitted to the Working Party on Housing and subsequently published for general circulation.

3	1978
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08.1.2. Co-operation with the Senior Economic Advisers to ECE Governments on the Overall Economic Perspective for the ECE Region up till 1990

Description: The Committee will take note of and comment on drafts of the Overall Economic Perspective and submit the results of relevant projects (e.g. 08.1.3, 08.1.5 and 08.3.5) to the Senior Economic Advisers to ECE Governments. This dialogue will help the Committee and ECE Governments to undertake long-term studies in the human settlements field in a broader framework, while at the same time ensuring a substantive sectoral contribution to the activities of the Senior Economic Advisers to ECE Governments.

Method of work: Co-operation between the Committee and the Senior Economic Advisers to ECE Governments will be ensured mainly through the secretariat.

2	1978
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<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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08.1.3. Long-term prospects and policies in the
construction sector

Description: The Committee will periodically examine forecasts and long-term prospects in the construction sector with a view to assisting Governments in drawing up long-term policies relating in particular to the required total capacity of the construction industry, composition of future demand, employment in construction and mechanization of building activities.

Method of work: As a follow-up to the Seminar on Long-Term Prospects and Policies in the Construction Sector, held in Copenhagen in January 1976, and the studies on housing forecasting and programming (project 08.3.5), ad hoc meetings will be organized from time to time on subjects to be selected by the Committee. Close co-operation will be maintained with the Senior Economic Advisers to ECE Governments.

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, focusing on housing and related services, with a view to perfecting tools and instruments at the disposal of Governments for ensuring an adequate supply and development of the land needed.

Method of work: Following an ad hoc meeting in June 1976, national monographs will be elaborated by interested countries; their analysis will be conducive to the definition of a number of topics which, in a second stage, will be discussed at a seminar to be held in Sweden in June 1978. Discussion papers for the seminar will be prepared by rapporteurs; the proceedings of the seminar will be prepared and published by the secretariat. This project should be seen as a contribution to the overall ECE efforts in land use planning and management.

<u>Estimated</u> <u>duration</u> <u>(in years)</u>	<u>Estimated</u> <u>termination</u> <u>year</u>
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08.1.5. 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, of investments and employment, of wages, prices and consumption as well as all other branches of the national economy, including the financial sector. The purpose of the project is to improve the understanding of the short, medium and long-term impact of housing policy measures.

Method of work: An exploratory discussion of the project will take place at the sixth session of the Working Party on Housing in December 1976 on the basis of papers prepared by two rapporteurs.

3	1979
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08.1.6. Impact of long-term energy problems on human settlements policies, especially energy saving

Description: The Committee will examine the impact of energy considerations on the planning and development of human settlements, including the effect on the location and density of new settlements, on community planning and on the design, construction and improvement of buildings. The purpose of this project is to assist Governments in drawing up medium and long-term human settlement policies taking duly into account economic, social and environmental implications of energy conservation policies.

Method of work: A seminar will be held in Canada in October 1977 based on documentation to be prepared by the Canadian authorities in co-operation with the secretariat and by a large number of Governments, international organizations and individual experts. An in-depth discussion of the seminar conclusions and recommendations will be held at the Committee's thirty-ninth session in September 1978. The seminar will constitute an important part of the overall ECE programme in the energy field and will be carried out in consultation with other Principal Subsidiary Bodies concerned.

3	1978
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<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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WORK AREA 08.2: INTEGRATED HUMAN SETTLEMENTS PLANNING
AND DEVELOPMENT

08.2.1. Review of current trends and policies

Description: The Committee will, at each plenary session, exchange views on current housing, building and planning trends and policies, including environmental aspects. The Committee will also discuss in depth, at each plenary session, a selected subject of topical interest to member Governments. These discussions enable Governments to draw on each others' experience in formulating and modifying their short and medium term policies.

Method of work: Every second year (even years), the discussion will be based on comprehensive country monographs prepared along common lines and circulated directly among Governments in advance of the session. In intermediate years, notes will be circulated, bringing the monographs up to date. The in-depth discussions will be based on specialized issue papers to be prepared by rapporteurs in co-operation with the secretariat.

cont.

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

Description: The Committee will promote international co-operation among institutes and government authorities dealing with urban and regional research. The purpose of this project is to increase the overall benefits to participating countries through common research efforts and the sharing of research experience and to provide a more scientific basis for policy-making concerning urban and regional planning and development and human settlements in general.

Methods of work: The Group of Experts on Urban and Regional Research will meet annually to monitor systematic co-operation among governmentally designated national focal points. Conferences of leading research officials will be organized every fourth year. Specialized colloquia will be organized by and on the responsibility of national focal points in co-operation with the secretariat. A directory of national institutes will be prepared and kept up to date, research programmes will be exchanged and special studies undertaken. Joint research projects involving research institutes from several countries will be carried out.

cont.

<u>Estimated</u> <u>duration</u> <u>(in years)</u>	<u>Estimated</u> <u>termination</u> <u>year</u>
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08.2.2.1. Urban and regional research policy and organization

Description: As a follow-up to the Third ECE Conference on Urban and Regional Research, held in Warsaw in 1976, the Group of Experts on Urban and Regional Research will study the problems of translating research results into practice through planning and design guidelines and modifications in the regulations governing physical planning.

Method of work: Results so far achieved will be published in a printed publication in 1976/77. The further work will be carried out by a team of rapporteurs (researchers) reporting to the Group of Experts.

3	1979
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08.2.2.2. Directory of national institutions concerned with urban and regional research

Description: A directory of national institutes concerned with urban and regional research, compiled and printed in 1968, will be brought up to date and published. In this connexion, it may possibly be extended to include institutes concerned with housing and other human settlements branches of research. The purpose of the directory is to identify and describe relevant research institutes and thus to provide a convenient tool for direct contacts in this field.

Method of work: The requisite material for the directory will be collected from Governments in 1976/77. The directory will then be compiled by the secretariat, or by a national focal point to be nominated, and subsequently issued as an ECE publication.

3	1979
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08.2.2.3. Quality of life in urban settlements

Description: The Group of Experts on Urban and Regional Research will continue to exchange views on research on quality of life in urban settlements, which is still in most countries at an early stage. The purpose is to assist Governments and research institutes in establishing a conceptual, terminological and methodological framework, to identify connexions between social welfare and well-being and the spatial structure and to develop a system of indicators which might be used as a practical tool in physical planning.

	<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
<p><u>Method of work:</u> A study based on contributions to the Third ECE Conference on Urban and Regional Research, held in Warsaw in 1976, will be published in 1977. Further studies will be undertaken by rapporteurs (researchers) reporting to the Group of Experts, possibly as part of the preparatory work for the Fourth Conference on Urban and Regional Research, planned to be held in 1980.</p>	5	1981
<p>08.2.2.4. <u>Exchanges of information on national research programmes</u></p> <p><u>Description:</u> The Group of Experts on Urban and Regional Research will continue, at its annual meetings, systematically to exchange information on national research programmes with a view to assisting national institutes in keeping abreast of research in other countries. This exchange will also be of help to government officials concerned with the overall planning and programming of research in this field.</p> <p><u>Method of work:</u> Annotated lists of basic urban and regional research projects, which are in progress and of wider interest, based on a common format, are prepared and exchanged annually directly between national focal points. National research digests on selected projects and trends are exchanged every four years and analysed with a view to revealing long-term trends.</p>	cont.	
<p>08.2.3. <u>Selected urban renewal problems and policies</u></p> <p><u>Description:</u> The Committee will continue to examine selected urban renewal problems and policies, such as methods of assessing the quality of existing built-up areas, methods of modernizing, improving and renewing cities and individual buildings, effects of urban renewal on other parts of a town and the relationship between urban renewal measures and the demand for leisure areas. These studies will assist Governments in formulating their policies in an area of increasing concern in all ECE countries.</p> <p><u>Method of work:</u> Following two symposia on urban renewal held in 1961 and 1970 and an in-depth discussion on the improvement of housing and its immediate surroundings, held at the Committee's 1976 session, a rapporteur, in consultation with the Chairmen of the Committee's three Working Parties, is preparing a draft seminar programme for examination by the Committee in September 1977.</p>	3	1979

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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08.2.4. Infrastructural planning for human settlements

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

Description: The Working Party on Urban and Regional Planning and Development will continue to examine the role of transportation in urban planning, development and environment. 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 the seminars held in Munich in 1973 and in Washington D.C. in 1976, a third seminar on the role of transportation in urban planning, development and environment will be organized in 1981, in co-operation with other Principal Subsidiary Bodies concerned.

2	1981
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08.2.4.2. Town-planning, ecology and technological progress

Description: The Working Party on Urban and Regional Planning and Development will examine the impact of technological progress on town planning and the urban ecology. The aim is to promote a multidisciplinary approach in infrastructural planning and assessment of impacts by an exchange of information and experience.

Method of work: An in-depth discussion on the subject will be held at the ninth session of the Working Party in February 1977. The follow-up work will then be defined by rapporteurs and initiated by the Working Party as soon as some other related projects have been finalized, e.g. project 08.1.4. on land-use planning and 08.1.6. on energy problems.

2	1979
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08.2.5. 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, in autumn 1977, the Group will discuss aspects of quality of life and urban design.

Estimated
duration
(in years)

Estimated
termination
year

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

cont.

08.2.6. Contribution to the follow-up of the
United Nations Habitat Conference

Description: The Committee will study the report of the United Nations Conference on Human Settlements (Habitat 1976) and related General Assembly decisions with a view to identifying areas in which the ECE could serve as an instrument for the follow-up work envisaged. The Committee and its Working Parties are expected to be of great value in the implementation of several conference recommendations relating to follow-up on the regional level.

Method of work: Following a tentative examination of the project at the Committee's session in September 1976, the project will be elaborated in detail at the Committee's 1977 session and reviewed thereafter at its annual sessions.

cont.

08.2.7. Integrated physical, socio-economic and
environmental planning

Description: The Working Party on Urban and Regional Planning and Development will continue to study and develop a methodology of integrated physical, socio-economic and environmental planning of human settlements. This project is expected to be of direct assistance to Governments and public authorities in physical planning on the national, regional and local levels.

Method of work: On the basis of the results of the Seminar on National and Regional Planning as Frameworks for Local Planning, held in Finland in 1975, a team of rapporteurs will define the project and propose possible methods of work for examination at the ninth session of the Working Party, in February 1977. A thorough analysis of the problems will then be undertaken by rapporteurs, possibly followed by a seminar. The project will be carried out in co-operation with the Senior Advisers to ECE Governments on Environmental Problems (see projects 05.1.1.1 and 05.3.2.1) and other Principal Subsidiary Bodies concerned.

<u>Estimated</u> <u>duration</u> <u>(in years)</u>	<u>Estimated</u> <u>termination</u> <u>year</u>
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08.2.8. Integrated planning of areas for tourism and recreation

Description: The Committee will study the methods and means of ensuring an interdisciplinary and integrated approach in the planning of areas for tourism and recreation, taking into account land-use, environmental, sociological and economic aspects. The aim is to assist Governments in formulating suitable tools for integrated planning in this field and to promote the application of such integrated planning in the ECE region.

Method of work: The project will be based on the results of the ECE Symposium on the Planning and Development of the Tourist Industry in the ECE Region, held in Yugoslavia in 1975, and take into account relevant aspects of related Committee projects, e.g. project 08.1.4 on land-use planning, project 08.2.4 on infrastructural planning and project 08.2.5 on special problems in southern Europe. It will be carried out in co-operation with other Principal Subsidiary Bodies concerned, in particular the Senior Advisers to ECE Governments on Environmental Problems.

3

1982

WORK AREA 08.3: SOCIO-ECONOMIC PROBLEMS AND POLICIES IN HOUSING

08.3.1. Review of trends and policies

Description: The Working Party on Housing, at its sessions (every twelve to eighteen months), 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, circulated in conjunction with the Committee session, oral statements will be made at the Working Party sessions concentrating on a few issues of particular interest. A brief summary of the debate will be prepared by rapporteurs and included in the report of the session.

cont.

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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08.3.2. Special housing needs, including migrant workers' housing

Description: The Working Party on Housing will continue to study the housing needs of the elderly, the handicapped, single people and small families. The housing needs of migrant workers may also be dealt with. It is expected that work in this field will lead to the formulation of general recommendations which would help Governments in orienting their policies.

Methods of work: The Working Party, at its sixth session, in December 1976, will discuss follow-up work to the seminar on special housing needs, to be held in the Netherlands in November 1976, and also consider the desirability and possibility of elaborating a project on housing needs for migrant labour.

2

1978

08.3.3. Financing of housing

Description: The Working Party on Housing will organize an exchange of views on problems facing Governments in the field of financing of housing as well as on experience gained by Governments with regard to related policies and measures taking into account newly arising social and economic conditions. Thus, the financing aspects in connexion with other Committee projects, such as those concerning land-use, housing policy and improvement and management and programming of housing, will be dealt with as an integrated whole.

Method of work: Rapporteurs will undertake an analysis of the various projects in which aspects of financing of housing are dealt with as well as of newly arising social and economic conditions affecting financing. Further work will be decided upon in the light of the results of this analysis.

3

1981

08.3.4. Housing management problems

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

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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Method of work: The Working Party, at its sixth session in December 1976, will examine general proposals for the implementation of this project to be submitted by rapporteurs. It is expected that, in the exploratory stage, a few rapporteurs will work out detailed proposals regarding issues which lend themselves to an exchange of information and experience on the international level, as well as suitable ways and means for further implementation of the project.

4

1981

08.3.5. Housing forecasting and programming

Description: 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.

Method of work: On the basis of monographs on techniques used, problems met and results obtained, to be prepared by interested countries, rapporteurs will prepare an analytical report. They will also formulate proposals concerning ways and means of undertaking further work of practical value to Governments.

cont.

WORK AREA 08.4: PROBLEMS AND POLICIES IN BUILDING MATERIALS AND CONSTRUCTION

08.4.1. Review of current trends and policies

Description: The Working Party on the Building Industry, at its sessions (every twelve to eighteen months), will conduct an exchange of views on current trends and policies in the field of building materials and construction. This exchange will assist Governments in formulating suitable policies to deal with short-term problems of topical interest.

Method of work: The chapter on building materials and construction of the annual country monographs on housing, building and planning trends and policies will be used as background documentation. The method of work will be further defined at the ninth session of the Working Party in December 1976. The exchange of views will then be initiated as from the tenth session of the Working Party.

cont.

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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08.4.2. Environmental problems arising from
construction activities

Description: The Working Party on the Building Industry will examine environmental problems arising from the extraction, production and transportation of building materials and components and from construction activities. The impact of construction activity on the built environment (visual pollution, monotony) will also be studied. The project will assist Governments in formulating policies aimed at higher environmental quality for built-up areas.

Method of work: Following the Fifth ECE Seminar on the Building Industry, to be held in Budapest in October 1976 on the theme "The building industry and the environment", specific aspects may be subject to further investigation by rapporteurs.

2

1980

08.4.3. Mechanization in transport, handling and
assembling of building components

Description: The Working Party on the Building Industry will study the progress made in the mechanization of the building industry in a broad sense, including possibilities of increasing efficiency, reducing noise and standardizing machinery and equipment. The project will help Governments in formulating suitable long-term policies in this field.

Method of work: An analytical report prepared by a rapporteur on the basis of country monographs will be examined by the Working Party at its ninth session in December 1976. It is envisaged that the project will be completed by the organization of a seminar in 1978 in a country to be designated.

3

1978

08.4.4. Building research policies

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

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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Method of work: A seminar will be held in Sweden in May 1977 based on introductory discussion papers prepared by rapporteurs, the International Council for Building Research, Studies and Documentation (CIB) and the secretariat. Countries and international organizations will be invited to submit response papers. An analytical report on the whole project will be prepared by the Swedish host authorities for examination at the tenth session of the Working Party, in 1978.

3	1978
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08.4.5. Use of computers in the building industry

Description: The Working Party on the Building Industry will promote co-operation among specialized institutes and government authorities concerned with the use of computers in the building industry. The aim is to economize the staff and financial resources of the institutes by the exchange of research programmes, the organization of co-operative projects, etc.

Method of work: The Working Party will review periodically this project which will be carried out to a large extent by direct co-operation among national focal points appointed by ECE Governments for the purpose. Ad hoc meetings on topical subjects will be organized from time to time in countries to be designated.

cont.

08.4.6. Selected problems of production and use of building materials and components

Description: The Working Party on the Building Industry will follow up trends and exchange views on the production and use of building materials and components with a view to assisting Governments in formulating long-term policies in this field.

Method of work: Following an enquiry and an analytical study presented to the eighth session of the Working Party, the Fifth Seminar on the Building Industry (project 08.4.2) and the Seminar on the Impact of Energy Considerations on the Planning and Development of Human Settlements (project 08.1.6), a study will be initiated or a seminar organized. The precise formulation of the project will be discussed at the tenth session of the Working Party in 1978.

3	1981
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<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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WORK AREA 08.5: PROMOTION OF INTERNATIONAL TRADE IN
BUILDING PRODUCTS AND KNOW-HOW

08.5.1. International harmonization of the technical
content of building regulations

Description: The Working Party on the Building Industry will promote concerted efforts by ECE member countries to harmonize the technical content of their building regulations with a view to alleviating technical obstacles to trade in building products and know-how. The progress in this work will be reviewed at each Working Party session (every twelve to eighteen months).

Method of work: Feasibility studies prepared by rapporteurs and the secretariat will be followed up by ad hoc meetings on topics to be selected by the Working Party. Inter-secretariat meetings with participation of intergovernmental and non-governmental organizations concerned will be regularly convened by the ECE secretariat. Technical and organizational work will be undertaken by rapporteurs and by the secretariat, reinforced by voluntary contributions in cash and in kind to a Trust Fund.

cont.

08.5.1.1. Unified systems for disposition and
formulation of building regulations,
including reference to standards

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

Method of work: Ad hoc meetings will be organized by the ECE in co-operation with the ISO, the CIB and other international organizations concerned, the first in Bulgaria in October 1976.

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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08.5.1.2. Index of national building regulations
and directory of internationally unified
building regulations

Description: The Working Party on the Building Industry will agree on a model index of national building regulations which will be used as a guide for preparing national indexes. These indexes will facilitate the retrieval of relevant information on national regulations by enterprises wishing to export their products and also facilitate an exchange of information on regulations between national authorities. A directory of building regulations which have been internationally unified on the sub-regional level, is also envisaged.

Method of work: Rapporteurs are preparing a model index for examination by the Working Party in December 1976. National indexes will then be prepared by ECE countries. The secretariat will compile information on internationally unified building regulations on the basis of information submitted by other international organizations concerned.

2

1977

08.5.1.3. Unified regulations for structural safety,
fire protection, internal climate, design
parameters and energy conservation

Description: The Working Party on the Building Industry, at its sessions (every twelve to eighteen months), will pursue a number of projects aiming at the unification of building regulations relating to structural safety, fire protection, internal climate and comfort, design parameters and energy conservation. The general aim is to alleviate technical obstacles to international trade in building products and know-how and to assist national authorities in their regulations work through international co-operation.

Method of work: Ad hoc meetings will be organized by the ECE in co-operation, as appropriate, with other international organizations. Recommendations to Governments and international organizations will be considered by the Working Party.

cont.

	<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
08.5.2. <u>Directories of information centres, approval agencies and other institutions concerned with building regulations</u>		
<p><u>Description:</u> At the request of the Working Party on the Building Industry, directories will be prepared on national information centres on building regulations and on national central approval agencies for typical drawings for structures and buildings and also of agencies concerned with requirements for designers, site engineers and other professionals for whom competence requirements are laid down. The aim is to facilitate work of enterprises wishing to export their products or services.</p> <p><u>Method of work:</u> The directories are being prepared by the secretariat on the basis of information submitted by Governments and international organizations concerned. First drafts will be circulated for comment in autumn 1976. Final versions of the directories will be published in 1977.</p>		
	2	1977
08.5.3. <u>Standardized methods of quality assessment, testing, control and approval of building products</u>		
<p><u>Description:</u> The Working Party on the Building Industry will promote the establishment of international agreements on methods of quality assessment, testing, control and approval of building products and on mutual recognition of test laboratories. The results of this project will substantially assist enterprises wishing to export their products.</p> <p><u>Method of work:</u> Ad hoc meetings will be organized by the ECE, with substantial contributions from sub-regional intergovernmental organizations and specialized non-governmental organizations, the first in June 1976.</p>		
	5	1981
08.5.4. <u>Review of trade trends and obstacles to trade in building products and know-how</u>		
<p><u>Description:</u> The Working Party on the Building Industry will undertake a study of trade and obstacles to trade in building products and know-how with a view to identifying current trade patterns, revealing obstacles to trade and establishing priorities for the programme of work on the harmonization of the technical content of building regulations.</p>		

	<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
<p><u>Method of work:</u> The review will be undertaken by the secretariat in co-operation with national authorities, international and national organizations active in the field of trade in building products and know-how.</p>	2	1978
<p>08.5.5. <u>Catalogues of structural systems and building components</u></p>		
<p><u>Description:</u> The Working Party on the Building Industry will promote the elaboration of catalogues of structural systems and building components with a view to facilitating international trade.</p>		
<p><u>Method of work:</u> ECE countries will elaborate the catalogues on the basis of a model worked out by rapporteurs.</p>	2	1978
<p>08.5.6. <u>Multilingual glossaries and dictionaries</u></p>		
<p><u>Description:</u> The Working Party on the Building Industry will promote the preparation of multilingual glossaries and dictionaries in the field of building materials and construction and, in particular, the harmonization of terminology and definitions relating to building regulations.</p>		
<p><u>Method of work:</u> The Working Party, at its ninth session in December 1976, will examine an analytical report on an enquiry addressed to Governments and international organizations. Further work on this project will be carried out in co-operation with several international organizations, in particular the CMEA, along lines to be agreed upon by the Working Party.</p>	5	1980
<p><u>WORK AREA 08.6: STATISTICS AND INFORMATION</u></p>		
<p>08.6.1. <u>Bulletin of housing and building statistics</u></p>		
<p><u>Description:</u> The Committee, together with the Conference of European Statisticians, will continue to collect and regularly publish statistical information on trends in the fields of housing and building.</p>		
<p><u>Method of work:</u> The secretariat will collect the requisite information from Governments annually and publish a bulletin in September each year.</p>	cont.	

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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08.6.2. Development of housing, building and planning
statistics, including methodology of international
comparisons in the construction field

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 and study how the statistical data can be used to establish indices to be used for international comparisons in the construction field.

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

cont.

09. - INLAND TRANSPORT

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

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

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

- | | | |
|---|-------|------|
| (a) Periodic consideration of new and important developments in respect of inland transport in member countries, with due regard to measures adopted to save energy, fuel and manpower. | cont. | |
| (b) Annual review of information collected in respect of taxes levied on transport and transport equipment. | cont. | |
| (c) Studies with regard to the apportionment of track costs among users of infrastructures. | cont. | |
| (d) Specific technological aspects related to one or more modes of transport. | cont. | |
| (e) The prospects for rail transport, in particular with regard to the development of high-capacity rapid transport systems. 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, including transit traffic. | 2 | 1978 |
| (g) The collection and periodic publication of information concerning existing bilateral agreements for international road transport; national legislation with regard to maximum weights and dimensions of motor vehicles; the application of the green card system for motor car insurance; and existing maximum speed limits for various categories of vehicles. | cont. | |

Estimated duration (in years)	Estimated termination year
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Method of work: With regard to project component (a) the Committee will periodically review information collected by means of a questionnaire circulated by the secretariat 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 to (f), the Committee, having agreed in principle at its previous session to the convening of a meeting on the subject in 1977, is expected to review at its thirty-sixth session proposals concerning the organization and documentation for this meeting.

With regard to project component (g), the Committee will review periodically the information prepared by the secretariat.

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

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

Method of work: The secretariat will prepare and submit to the Committee the documentation which will be needed for this purpose and will assist the Committee in carrying out its work on this project.

2

1978

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;

6

1982

	Estimated duration (in years)	Estimated termination year
(b) study in depth certain aspects of prospects for the development of inland water transport in Europe to be selected by the Committee;	6	1982
(c) study and review of progress with regard to the Danube-Oder (Elbe) connexion.	3	1979

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.

09.2.2. Selected technological problems in the development and operation of inland waterway 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) new techniques in inland navigation - pushing;	cont.	
(e) devices for coupling pushed barges to one another, to pusher craft and to self-propelled pusher barges.	4	1980

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

Estimated duration (in years)	Estimated termination year
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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, having co-sponsored with the Committee on Housing, Building and Planning and the Senior Advisers to ECE Governments on Environmental Problems, the Second Seminar on the Role of Transportation in Urban Planning, Development and Environment, will continue to exchange information on selected topics in this field.

Method of work: The Committee will give further consideration to the method in which future work will be organized with an analysis of the elements contained in the replies to the questionnaire on the general tendencies of transport evolution and policy.

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

Description: In order to adjust the European Road network to changing requirements, the Committee will take up proposals, as required, for amending the provisions of the Agreement with regard to the composition of the network, its numbering, and technical standards.

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

09.2.5. Development of road networks

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

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

Estimated duration (in years)	Estimated termination year
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Method of work: The preparation of technical reports, with the help of experts, where appropriate financed from UNDP funds, for consideration and action by the North-South Motorway Steering Committee and its expert teams. Progress reports to be reviewed by the Working Party on Road Transport and its ad hoc meeting on the subject. 1/

5	1981
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- (b) Linking of the European road network to that of other regions

Description: In co-operation with ESCAP, ECWA and ECA the Committee will promote the development of inter-regional road links, in particular in areas where the recent road transport increase has created difficulties.

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

5	1981
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09.2.6. Automatic railway coupling

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

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

cont.

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 for the international transport of goods in the region, set out in international agreements and recommendations and take action periodically for keeping them up to date and for facilitating their application. This will include the following project components:

1/ The exact method of work for this project will be decided on and developed on the basis of the decisions taken at the Steering Committee in March 1977.

	Estimated duration (in years)	Estimated termination year
(a) Harmonization and modernization of the relevant provisions of the ADR and RID, and in particular consideration of proposed amendments relating to those parts of annexes A and B of the European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR) which are common to the Regulations concerning the International Carriage of Dangerous Goods by Rail (RID)	cont.	
(b) Consideration of proposed amendments to ADR provisions specific to road transport and to provisions set out in ITC Resolution No. 223 concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN).	cont.	
(c) Handling of administrative and technical questions arising from the application of the ADR.	cont.	
(d) Co-operation with the United Nations Economic and Social Council Committee of Experts on the Transport of Dangerous Goods and its subsidiary bodies, in particular as regards the Inland Transport Committee's contribution to the elaboration of a possible world-wide Convention on the Transport of Dangerous Goods by all modes of transport.	6	1982

Method of work: With regard to project component (a), the proposals will be considered by 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 annexes A or B of ADR.

09.3.2. Selected problems of simplification and harmonization of administrative formalities and Customs procedures in the field of international transport, in particular at frontiers

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

- (a) Study of information on the difficulties encountered at frontiers by rail transport with regard both to the administrative organization and to the capacity of installations with a view to eliminating such difficulties, and review of related activities of international organizations concerned.
- cont.

	Estimated duration (in years)	Estimated termination date
(b) Study of Customs questions with a view to simplification of Customs formalities and documents (<u>inter alia</u> railway consignment note) in the field of transport.	cont.	
(c) Study of ways and means of preventing abuse of the advantages resulting from the introduction of simplified Customs procedures, including review of implementation of Resolution No. 220 (prevention of the abuse of Customs transit systems by drug smugglers).	4	1980
(d) Study of problems due to controls 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).	5	1981

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

With regard to project components (b) and (c), the Group of Experts on Customs Questions affecting Transport (in co-operation, where appropriate, with the Committee on the Development of Trade through the secretariat in respect of (b)) is implementing these project components, while the Inland Transport Committee and its subsidiary bodies concerned, as required, implement project component (d).

09.3.3. Accession to, 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 amendments should be prepared or a revision undertaken. 1/

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
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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 the TIR Convention and other Customs transit systems. It will also review existing Conventions in connexion with the possible updating of their provisions. The Working Party on Road Transport reviews at its sessions questions concerning the application of the Convention on the International Carriage of Goods by Road (CMR) and the Convention on the Contract for the International Carriage of Passengers and Luggage by Road (CVR). The Working Party on Inland Water Transport and its Group of Experts on River Law consider at their sessions questions concerning the implementation of inland navigation conventions (including possible resumption of work on a draft Convention on the Contract for Carriage of Goods by Inland Navigation (CMN)).

cont.

09.3.4. Promotion of combined transport and study of requirements for multimodal transport equipment and its utilization, including co-operation with UNCTAD with regard to drafting a convention on international multimodal transport and its work on container standards

Description:

(a) The Committee will select administrative, technical, economic and legal aspects of multimodal transport for study with a view to the development of appropriate measures to promote combined transport and to ensure maximum utilization of equipment used for such transport. It will also study standardization and harmonization of dimensions, handling requirements, marking, coding and identification systems for containers and review the development of technology in combined transport.

cont.

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

Estimated duration (in years)	Estimated termination year
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Method of work: Consideration, on the basis of studies prepared by the secretariat, and by rapporteurs at sessions of the Group of Rapporteurs on Container Transport, and secretariat co-operation with the UNCTAD secretariat and other international organizations.

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

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

cont.

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

Description: The Committee will continue or undertake work on:

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|--|---|------|
| (a) Standardization of technical requirements for commercial craft and the application of these requirements to vessels in service. | 3 | 1979 |
| (b) Standardization of technical requirements for pushed barges and their equipment. | 4 | 1980 |
| (c) Study of the standardization of requirements for the construction and equipment of pleasure craft. | 6 | 1982 |
| (d) Criteria for the definition of the maximum number of persons on board pleasure craft. | 3 | 1979 |
| (e) Standardization of and reciprocal recognition of certain ships' papers with a view to elaborating or updating resolutions on these subjects. | 4 | 1980 |
| (f) Harmonization of the standards to be applied to techniques for the prevention of water pollution by inland navigation vessels. | 4 | 1980 |

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.

	Estimated duration (in years)	Estimated termination date
09.3.7. <u>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)</u>		
<u>Description:</u> 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 Agreement on the Transport of Perishable Foodstuffs (ATP) and, where appropriate, its modification.	cont.	
(b) The application of the Committee's resolutions on standardization of packagings for certain perishable foodstuffs.	cont.	
(c) The follow-up of the implementation of Resolution No.218 recommending the reciprocal recognition of certificates of conformity for insulated, refrigerated, mechanically-refrigerated or heated equipment used for the international carriage of perishable foodstuffs by land.	2	1978
<u>Method of work:</u> Study of the problems involved by the Group of Experts on the Transport of Perishable Foodstuffs, with a view to possible modification of the Agreement (ATP) and the resolution.		
09.3.8. <u>Elimination of technical barriers to international trade in motor vehicles and their equipment</u>		
<u>Description:</u> With a view to developing standards for motor vehicle equipment and parts, the Committee will keep up to date and supplement the thirty-six 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) Review and development of the 1958 Agreement and its annexes.	cont.	
(b) Completion of a set of technical regulations for "type approval" of the motor vehicle as a whole.	3	1979
(c) Harmonization of test procedures and other requirements for motor vehicle certification or approval.	6	1982

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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Method of work: Consideration of problems raised at, or proposals submitted to, the Group of Experts on the Construction of Vehicles and its subsidiary bodies. With regard to (c), the study of various aspects of a possible harmonization of test procedures and other requirements for motor vehicle certification or approval.

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

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

Method of work: The Committee will decide in due course on the method of work to be followed in the light of information to be transmitted by the countries concerned.

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 trade and the introduction of new transport techniques and equipment

Description: The Committee will study problems arising in transport of newly developed toxic substances, and 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 this annex.

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

09.4.2. Selected problems of harmonization and codification of administrative and technical provisions concerning safety in inland waterway 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:

	Estimated duration (in years)	Estimated termination year
(a) Application of the European Code for Inland Waterways (CEVNI) and the provisions concerning Signs and Signals on Inland Waterways (SIGNI), and their revision with a view to the harmonization of the rules of the road and signs and signals used in various inland waterways.	6	1982
(b) Drafting of standardized provisions concerning lake navigation and concerning navigation for pleasure.	2	1978
(c) Study of problems connected with the implementation of an international certificate for pleasure craft and an international certificate of competence for pleasure craft operators.	4	1980
(d) Study of the standardization of requirements for the issue of boatmasters' certificates with a view to the reciprocal recognition of certain requirements.	3	1979
(e) Study of the problem of compulsory insurance and of the standardization of the rules concerning liability of owners and users of pleasure craft.	3	1979
(f) Study of possible codification of existing safety provisions concerning inland navigation.	8	1984

Method of work: With regard to project components (a) 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 (b), it will continue the drafting of provisions to be included in CEVNI; with regard to project component (d), the Group of Experts on the Standardization of Technical Requirements for Vessels and of Ships' Papers will continue to review proposals before it; while project components (e) and (f) are under consideration by the Working Party on Inland Water Transport.

09.4.3. Safety requirements for the construction, transport and handling of containers

Description: The Committee will review periodically safety requirements applicable to construction and use of all types of containers to meet the requirements of new operational and technical developments, and exchange views on interpretation and application of the International Convention for Safe Containers (CSC).

Method of work: Work on this project will be carried out by the Group of Rapporteurs on Container Transport and in co-operation with IMCO through the secretariat.

cont.

Estimated duration (in years)	Estimated termination year
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09.4.4. Safety requirements for road transport, including safety standards for motor vehicle construction and inspection; road traffic rules, road signs, signals and markings, and drivers' competence and other road users' behaviour

Description: The Committee will select problems for study and for adoption of international provisions and recommendations concerning road signs, signals and markings, drivers' and other road users' behaviour, motor vehicle construction and inspection.

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

09.4.5. Safety provisions for ropeways

Description: The Committee will study the revision of Resolution No. 208 on installations for transport by rope and ski-lifts open to the public.

Method of work: Consideration of draft proposals by the Inland Transport Committee and, where appropriate, by ad hoc meetings convened for this purpose. 2 1978

09.4.6. Safety regulations for transport of petroleum products by pipeline

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

Method of work: Circulation of documentation, where appropriate, for consideration by the Inland Transport Committee. 4 1980

09.4.7. Co-operation with other regional economic commissions in sharing ECE experience in promoting transport safety

Description: Study of problems of mutual interest in the field of transport safety.

Method of work: The ECE secretariat will, as appropriate, keep the secretariats of other regional economic commissions informed concerning the results of relevant studies undertaken within the ECE. 4 1980

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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WORK AREA 09.5: ENVIRONMENTAL AND RESOURCE SAVING ASPECTS

09.5.1. Prevention of water pollution and control of noise
caused by inland waterway craft

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 on Resolution No. 11 concerning the control of noise and vibration caused by such craft.

Method of work: The Group of Experts on the Transport of Dangerous Goods will elaborate recommendations on measures to be taken to prevent pollution during the carriage of dangerous goods and the Working Party on Inland Water Transport will continue its work on the implementation of Resolutions No. 11 and No. 18.

3

1979

09.5.2. Reduction of pollution and noise in road transport

Description: The Committee will study relevant technical problems with a view to a progressive reduction of existing admissible limits concerning noise and emission of pollutants by motor vehicles, and also with a view to preventing pollution which might be caused during the transport of dangerous goods.

Method of work: Elaboration of recommendations and draft regulations by the Group of Experts on the Construction of Vehicles and its subsidiary bodies, and, with regard to pollution during the transport of dangerous goods, by the Group of Experts on the Transport of Dangerous Goods.

cont.

09.5.3. Increased economy and efficiency in energy
consumption in transport

Description: The Committee will study energy-related aspects of transport policy and transport operations involving the following project components:

- (a) Review of policy measures adopted to save energy, fuel and manpower, in order to determine appropriate action.
- (b) Development of methods for reducing the cost of electrification and dieselization, and of methods, applied or under study, aiming at reduction of energy consumption in railway operations.
- (c) Study of problems related to the use of fuel by power-driven vehicles.

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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Method of work: With regard to project components (a) and (b), developments will be reviewed by the Inland Transport Committee and the Working Party on Rail Transport respectively. With regard to project component (c), studies will be undertaken by the Group of Experts on the Construction of Vehicles.

5	1981
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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.

Method of work: The secretariat will collect data by means of questionnaires drawn up in the light of decisions taken by Groups of Experts on Transport Statistics, on Road Traffic Safety, and the Group of Rapporteurs on Container Transport, and arrange for their publication in the appropriate bulletins.

cont.

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 the 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; consideration of the Standard International Classification of all Goods and Services (ICGS) as it relates to transport and to the Standard International Trade Classification revised (SITC); and review of the Commodity Classification for Transport Statistics in Europe (CSTE).

cont.

- (b) Study of specific aspects of the methodology employed in collecting statistics on international and national inland transport, container transport and port traffic

cont.

	<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
(c) Study of specific aspects of the development of road traffic and road traffic accident statistics including review of methods for obtaining statistics on international road traffic, 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.	
(d) Study of simplified methods of carrying out censuses in general and their application to the transport field.	2	1978
(e) Development of standards and methodology for statistics concerning the use of energy in transport.	3	1979
(f) Consideration of guidelines for a system of price and quantity statistics and its implementation in the transport field.	2	1978
(g) Review of the implementation of European Programme of Basic Inland Transport Statistics and analysis of the methods used for the collection of statistics set out in this programme.	1	1979

Method of work: Work on these problems will be carried out by the Group of Experts on Transport Statistics, in co-operation with the Conference of European Statisticians with regard to project components (f) and (g), with the Group of Experts on Road Traffic Safety with regard to project component (c), and with the Group of Rapporteurs on Container Transport with regard to project component (b).

09.6.3. Road traffic censuses

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

Method of work: Recommendations will be drawn up by the Group of Experts on Transport Statistics and by ad hoc meetings convened for this purpose. The results will be published in tabular and map form by the secretariat.

cont.

09.6.4. Publication of maps of inland waterways used in international traffic

Description: The Committee will periodically consider the preparation of maps on the subject.

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

cont.

10. - SCIENCE AND TECHNOLOGY

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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WORK AREA 10.1: LONG-TERM TRENDS AND PERSPECTIVES

10.1.1. Co-operation with the Senior Economic Advisers to ECE Governments on the Overall Economic Perspective for the ECE Region up to 1990

Description: The Senior Advisers will identify and examine economic sectors in which major technological change is likely to be required or to occur up to the year 1990, with a view to providing information to national authorities who will be making decisions affecting long-range developments in these sectors.

Method of work: Studies will be prepared for consideration by meetings convened under the joint auspices of the Senior Economic Advisers and the Senior Advisers on Science and Technology.

4	1980
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10.1.1.1. Review of current and proposed work within the ECE and of other bodies on technological forecasting

Description: The Senior Advisers will consider the current and planned work in the field of long-term trends and perspectives of other bodies of the Commission and of other organizations with a view to ensuring that the work programme which is prepared for the Senior Advisers complements the work of others.

Method of work: A report will be prepared by the secretariat for consideration at an ad hoc Meeting of Experts on Technological Forecasting.

1	1977
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10.1.2. Study of interrelationships between economic and technological developments

Description: The relationships between technological progress and economic activities, both on a sectoral and on a national basis, will be examined with a view to improving the understanding of policy-makers of those relationships and the means of influencing them.

Method of work: Studies will be prepared by the secretariat.

3	1980
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<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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10.1.3. Technological trends up to 1990 and prospects
in major economic sectors

Description: The Senior Advisers will examine possible and probable major technological trends, and anticipated needs for innovation, by means of technological forecasts as appropriate, up to the year 1990 in selected economic sectors such as basic industrial materials and energy with a view to assisting policy-makers who will be making recommendations and taking decisions affecting activities in these fields.

Method of work: A general review paper will be prepared by the secretariat taking into account the relevant activities of the other Principal Subsidiary Bodies, for consideration by an ad hoc Meeting of Experts on Technological Forecasting.

cont.

10.1.3.1. Technological trends in basic materials and natural resources

Description: Reviews of the technological prospects of selected basic materials will be undertaken in order to provide information on the problems which may arise and possible solutions to them.

Method of work: [to be completed in the light of discussions at the ad hoc Meeting of Experts on Technological Forecasting].

cont.

10.1.3.2. Technological forecasting in the energy field

Description: Senior Advisers will examine prospective technological needs in the energy field as well as the evaluation of current technologies.

Method of work: [to be completed in the light of discussions at the ad hoc Meeting of Experts on Technological Forecasting].

10.1.4. Technology assessment

Description: The Senior Advisers at their annual sessions will assess the economic, social and environmental consequences of prospective technological developments in order to identify effects which may require special attention on the part of national authorities.

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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Method of work: Assessments will be carried out in co-operation with the Senior Advisers to ECE Governments on Environmental Problems and other Principal Subsidiary Bodies for consideration at the annual sessions of the Senior Advisers on Science and Technology.

5	1981
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10.1.4.1. Environmental aspects of energy production and use

Description: The Senior Advisers, in co-operation with the Senior Advisers on Environmental Problems, will continue to study the subject of "The environmental aspects of energy production and use with special reference to new technologies" (ENV/R.43).

Method of work: The secretariat will complete the study (ENV/R.43) on the basis of comments received from Governments.

1	1977
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WORK AREA 10.2: CURRENT DEVELOPMENTS IN SCIENCE AND TECHNOLOGY POLICIES

10.2.1. Changes in national science and technology policies, priorities and institutions including orientation and administration of research policies

Description: A biennial review will be undertaken of the major changes occurring at the national level in science and technology policies, priorities in the fields of science and technology and the institutional arrangements for the evaluation and implementation of policies with a view to ensuring that these changes and the reasons for them are known.

Method of work: Governments will provide information for incorporation by the secretariat in a biennial review.

cont.

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

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

Method of work: Governments will provide information for incorporation by the secretariat in periodic reviews and analysis of particular bilateral agreements.

cont.

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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10.2.3. Identification of problems requiring priority attention in national and international scientific and technological policies

Description: The major problems which may arise in selected technological fields will be identified in order that they may be given priority attention by national authorities.

Method of work: Review and analysis of selected areas for consideration by the Senior Advisers at their annual sessions.

cont.

WORK AREA 10.3: INTERNATIONAL CO-OPERATION IN SCIENTIFIC AND TECHNOLOGICAL RESEARCH

10.3.1. Review of scientific and technological research in selected problem sectors

Description: Reports of the research plans and needs in selected sectors as agreed from time to time will be prepared with a view to identifying projects which might be the subject of international co-operation.

Method of work: In accordance with a methodology to be elaborated by the secretariat, Governments will provide pertinent information and expressions of their interest concerning projects which could provide a foundation for international co-operation, on the basis of which reports will be prepared by the secretariat for review by an ad hoc meeting of experts and at a future session of the Senior Advisers.

cont.

10.3.1.1. Policy development, resource allocation and co-operation in the energy R and D field

Description: The report on an analytical framework for assisting Governments in designing their energy R and D strategies and in selecting projects which might be the subject of international co-operation will be completed.

Method of work: The study of the secretariat will be completed with assistance from governmental rapporteurs. This activity will be carried out in co-operation with the other energy-related Principal Subsidiary Bodies of the Commission and taking into account the comments contained in paragraph 11 of document SC.TECH./AC.5/2.

Estimated duration (in years)	Estimated termination year
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10.3.1.2. Improvements to existing energy technologies and research and development on new energy sources

10.3.1.2.1. Technologies related to new energy sources

Description: A study of the research and development efforts being directed towards making new energy sources available will be conducted with a view to identifying those sources which might be the subject of more detailed examination and of co-operative international research.

Method of work: A report will be prepared by the secretariat for review at the sixth session of Senior Advisers in July 1977.

1	1977
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10.3.1.2.2. Technologies connected with the utilization of low-calorific value fuels

An ad hoc Meeting of Experts will be convened in conjunction with the Coal and Gas Committees in order to define the activities of the Commission in this field.

1977

10.3.2. Study of possibilities for expanding and promoting multilateral co-operation

cont.

10.3.2.1. The organization and management of co-operative international research

Description: Study on the organization and management of co-operative international research (and methodologies for initiating co-operative projects) will be completed in order possibly to form a basis for the preparation of an ECE Guide on co-operative international research.

Method of work: Study prepared by the secretariat for review by the Senior Advisers at their sixth session in July 1977.

1	1977
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WORK AREA 10.4: TRANSFER OF TECHNOLOGY

10.4.1. Exchange of information and experience on transfer of technology by use of commercial channels and on models of identifying and transferring technological and scientific developments

Description: Case-studies of transfers of technology between enterprises in selected industrial sectors operating in countries with different economic and social systems and at

Estimated duration (in years)	Estimated termination year
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different levels of economic development will be undertaken in order to identify any difficulties as well as to promote such transfers and the actions required to facilitate smooth intra-regional flows of technology.

Method of work: Case-studies will be prepared by governmental rapporteurs on the experience of their enterprises engaged in international technology transfer. These case-studies will be developed on the basis of a common framework prepared by the secretariat and approved by Senior Advisers. National authorities will designate a rapporteur who will act as a "focal point" for the receipt and transmittal of information and as the interface with the ECE secretariat for studies in the field of technology transfer. The case-studies will be forwarded by the governmental rapporteurs to the secretariat who will send copies to other governmental rapporteurs as well as collate these studies for consideration at the sixth session of Senior Advisers.

2

1978

10.4.2. Measures to promote the transfer of technology between ECE member countries

Description: The difficulties in and facilitation of the transfer of technology between countries with different economic and social systems and at different levels of economic development within the ECE will be examined and initiatives taken to improve the intra-regional flows of technology.

Method of work: Studies for review by ad hoc meetings or seminars will be carried out by the secretariat using, inter alia, the case-studies prepared under project 10.4.1.

3

1980

10.4.2.1. Studies on the institutional, administrative, economic and legal factors affecting the transfer of technology in the ECE region

Description: The Senior Advisers will examine factually-based reference material on those aspects of the international transfer of technology relating to governmental structures, and administrative, economic and legal factors with a view to developing an information base for enterprises involved in international transfers of technology in the ECE region.

Estimated duration (in years)	Estimated termination year
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Method of work: Studies and reviews will be carried out in co-operation with the Committee on the Development of Trade for consideration by jointly-convened ad hoc meetings of experts.

2	1978
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10.4.2.2. Preparation of a Manual on licensing procedures and related aspects of technology transfer

Description: The Senior Advisers, in co-operation with the Committee on the Development of Trade, will draw up a Manual on licensing procedures and related aspects of technology transfer with a view to making such a Manual available to enterprises which are engaged in the licensing of technology or its transfer within the ECE region.

Method of work: A Manual prepared by the secretariat with the help of governmental rapporteurs for consideration at an ad hoc meeting convened jointly with the Committee on the Development of Trade.

2	1978
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WORK AREA 10.5: OTHER CO-OPERATIVE ACTIVITIES

10.5.1. Development of the statistics of science and technology

Description: The need for new statistics to assist science and technology policy-makers as well as the interpretation and adequacy of existing statistics will be studied in order to provide policy-makers with improved means of assessing the need for new policies and the effects of current ones. The first of these studies will deal with the measurement of technology flows.

Method of work: Ad hoc Meeting of Experts will be convened in 1977 in conjunction with UNESCO and the Conference of European Statisticians to discuss reports prepared by governmental rapporteurs and the secretariat.

1	1977
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10.5.2. Contribution to the preparations for the United Nations Conference on Science and Technology for Development

Description: The Senior Advisers will initiate activities at the regional level in preparation for the United Nations Conference on Science and Technology for Development.

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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Method of work: The secretariat will send a letter to Governments asking that they make known to the secretariat, within four months, their proposals and comments on the topics and the procedure to be followed for the preparation, within the framework of the ECE, of the regional meeting in 1978. This letter shall invite delegates of interested Governments to an informal meeting to be held at the beginning of 1977 for a first discussion on the basis of the proposals and comments received and also the decisions taken at the first meeting of the Preparatory Committee of the Conference. The secretariat will make a synthesis of the proposals and comments in time for the informal meeting in early 1977 and this synthesis, as well as the conclusions of the informal meeting, will be submitted to the sixth session of the Senior Advisers on Science and Technology. During the preparatory period, the ECE secretariat will keep in close contact with the Permanent Missions and the secretariat of the Conference.

4

1979

10.5.3. Sponsoring of conferences, symposia and study and working groups such as those that would bring together younger scientists and technologists with eminent specialists in their field

Method of work: The secretariat will examine the question of the implementation of that portion of the Final Act of the Conference on Security and Co-operation in Europe (CSCE) requesting the Economic Commission for Europe to sponsor conferences, symposia and study and working groups such as those that would bring together younger scientists and technologists with eminent specialists in their field and report the results to the sixth session of the Senior Advisers on Science and Technology.

3

1979

11. - ECONOMIC PLANS, PROGRAMMES AND PERSPECTIVES

Estimated duration (in years)	Estimated termination year
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WORK AREA 11.1: MEDIUM- AND LONG-TERM PLANS; PROGRAMMES AND PERSPECTIVES

11.1.1. Exchange of information and views on the preparation and implementation of medium- and long-term plans, programmes and prospects.

Description: The Senior Economic Advisers to ECE Governments will continue to engage, on an annual basis, in exchanges of information and views on activities concerning the preparation and implementation of medium- and long-term plans, programmes and prospects.

Method of work: At each session, country notes containing factual information on new activities and institutional features will be prepared by Governments and submitted to the session as background information. [It is not suggested that these notes should be discussed as such but reference to their content could be made when discussing substantive problems, as suggested in 11.1.2.] The secretariat will prepare, from time to time, a review of institutional arrangements for medium- and long-term plans and programmes on the basis of available information. cont.

11.1.2. Information on the general orientation of national economic plans, programmes and prospects on the development of national economies.

Description: The Senior Economic Advisers will continue their annual exchanges of information on the general orientation of economic plans, programmes and prospects and the future development of national economies, with a view to identifying common long-term trends and policy issues. This discussion will also provide guidelines for selecting issues for detailed studies in work area 11.2.

Method of work: At each annual session, a list of issues for discussion will be selected by the Senior Economic Advisers on the basis of suggestions made in notes prepared by the Governments and by the secretariat. cont.

Estimated duration (in years)	Estimated termination year
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11.1.3. Preparation of long-term Overall Economic Perspectives for the ECE region.

Description: The Senior Economic Advisers will continue their work on an Overall Economic Perspective for the ECE Region up to 1990, with a view to (i) formulating long-term economic problems of common interest and areas in which intergovernmental co-operation might be required; and (ii) providing ECE Governments and Principal Subsidiary Bodies of ECE with overall economic views on regional development within the context of the world economy. A new perspective will be prepared about every five years, with a sliding long-term horizon (e.g. 15 years).

Method of work: The preparation of Perspectives will be made with the help of the secretariat, and in co-operation with other Principal Subsidiary Bodies on relevant aspects. cont.

WORK AREA 11.2: SELECTED LONG-TERM ECONOMIC POLICIES AND PROBLEMS

11.2.1. Long-term problems of basic products and energy

Description: The Senior Economic Advisers will continue to study long-term problems of basic products and energy, with special attention to opportunities for intergovernmental co-operation. In particular, pursuant to operative paragraph C(iii) of Commission decision G(XXXI), they will explore long-term energy consumption perspectives and scenarios in the light of energy conservation programmes, and consider ways in which national plans and programmes for economic growth can incorporate the objective of lowering energy consumption rates and increasing energy efficiency.

Method of work: In the immediate future, long-term problems of basic products and energy will continue to be discussed as a special section of the Overall Economic Perspective. [Since this issue has long-term implications going much beyond the next 15 years, as now envisaged in the Overall Economic Perspective, it is suggested that new methods of work should be defined by the Senior Economic Advisers for work in 1978 and subsequent years].

Estimated duration (in years)	Estimated termination year
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11.2.2. Identification of long-term development projects of common interest and their potential contribution to long-term development of the ECE region.

Description: In close co-operation with the Principal Subsidiary Bodies concerned, the Senior Economic Advisers will endeavour to identify in advance potential sectoral or intersectoral imbalances and opportunities for increased trade and industrial co-operation within the region to which these might give rise. Special attention should be given to areas in which long-term investments are needed such as transport infrastructure, or pollution abatement activities in certain sectors. [Similar work on basic products and energy is envisaged under 11.2.1.]

Method of work: [To be identified in 1978 by the Senior Economic Advisers, in the light of comments received from other Principal Subsidiary Bodies on the project of the Overall Economic Perspective.]

3 1980

11.2.3. 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, including joint ventures, in shaping the future pattern of international economic relations. The outcome of this project should be the elaboration of an enlarged concept of economic co-operation in the ECE region, encompassing trade as well as investment policies, transfer of technology and the development of transport infrastructure.

Method of work: [To be defined by the Senior Economic Advisers as a follow up to the Seminar held in December 1976 in Budapest (Hungary) on factors of growth and investment policies: An international approach. In particular a seminar might be envisaged on institutions, forms and long-term orientations of international economic co-operation between countries with different economic and social systems, as suggested by the ad hoc meeting of experts in September 1976.]

2 1979

	Estimated duration (in years)	Estimated termination year
11.2.4. <u>Selected long-term problems such as infrastructure investment, regional planning, manpower and public expenditure.</u>		
<u>Description:</u> [Selection of problems to be made by the Senior Economic Advisers after their fourteenth session, following their consideration of basic products and energy above.]		
<u>Method of work:</u> [Seminars or <u>ad hoc</u> meetings of experts at the discretion of the Senior Economic Advisers.]	3	1980
<u>WORK AREA 11.3: INSTRUMENTS AND METHODS FOR THE ELABORATION OF NATIONAL PLANS, PROGRAMMES AND PROJECTIONS</u>		
11.3.1. <u>Methodology of models and systems of models</u>		
<u>Description:</u> 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 new seminars. A related activity is the organization of annual exchanges of bibliographical information on quantitative methods applied to economic planning and decision making.		
<u>Method of work:</u> [A seminar to be defined at the fifteenth session of the Senior Economic Advisers in 1978, possibly on the methodology of complex development programmes.] 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.
11.3.2. <u>Interrelations between long-term social and economic growth policies</u>		
<u>Description:</u> The secretariat will consider the inter-relations between long-term social and economic growth policies, with special emphasis on objectives in the fields of employment, income distribution and consumption.		
<u>Method of work:</u> A seminar will be organized in 1977 on long-term structural changes in employment, income distribution and consumption, with the co-operation of the United Nations Division for Social Affairs and the ILO.	1	1978

12. STATISTICS

Estimated duration (in years)	Estimated termination year
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WORK AREA 12.1: REGIONAL STATISTICAL CO-OPERATION

12.1.1. Review of statistical work in the ECE region, including current ECE statistical work and work of other organizations in the ECE region

Description: Review of statistical work under the programmes of the Principal Subsidiary Bodies of ECE, other statistical work of the secretariat; review of statistical work of the inter-governmental organizations in the ECE region, with a view to promoting co-ordination of statistical activities.

Method of work: Preparation of reports by the secretariat on the statistical work of ECE for consideration at annual plenary sessions; preparation of reports by the international organizations active in the ECE region on their statistical work, for consideration at annual plenary sessions.

cont.

12.1.2. Promotion of co-ordination of the statistical activities in Europe of international 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 annual plenary sessions of questions concerning the development and improvement of the statistical basis for the work of ECE; see other items in the programme of work; provision of statistical data for ECE studies and projects (by national statistical offices).

cont.

Estimated duration (in years)	Estimated termination year
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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 United Nations Statistical Commission, with particular reference to the circumstances and requirements in the ECE region.

Method of work: Consideration at annual plenary sessions of matters relating to its participation in the work of the United Nations Statistical Commission: the specific projects and objectives and the methods by which they are carried out are described in the relevant items of the programme of work.

cont.

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

Description: Support for UNDP regional and interregional projects in statistics, statistical information systems, use of computers for statistical purposes and training in use of computers.

Method of work: Consideration at annual 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: Preparatory work for the fourteenth session of the Working Party on EDP: (i) a further round of national reports on selected aspects of the use of EDP for statistical purposes and on generalized computer programmes; (ii) completion by the group of rapporteurs of the report on data base management; (iii) preparation by Romania of a report on technical aspects of registers of economic and social units;

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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(iv) preparation of a report on automated systems of data input; preparation of a report on clearing house arrangements for generalized programmes; fourteenth session of the Working Party on the subjects indicated, or on a reduced number of subjects.

1	1977
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Preparatory work for later sessions of the Working Party: (i) preparation of a report on the development and creation of automated data banks; (ii) preparation of a report on the impact of mass storage devices on statistical data processing.

1	1978
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Co-operation in the ISIS seminars; establishment and implementation of the co-operative research programme under the Conference's auspices; receipt of reports on the progress of the programme.

cont.

12.2.2. Methods of improving operational techniques of producing official statistics

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

Method of work: Study of selected problems in the field of methodology of statistics; meeting on methodological problems relating to household surveys in 1977/78 (or possibly in 1976/77); continuation of the study; the need for further meetings to be considered later.

2	1978
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12.2.3. Statistical services in ten years' time

Description: Holding of a seminar on statistical services in ten years' time.

Method of work: Preparation of the documentation (by national rapporteurs and the secretariat) for, and seminar on, statistical services in ten years' time, to consider: (i) purpose and issues of the seminar; (ii) the environment in which national statistical services will work in ten years' time; (iii) organization and co-ordination questions; (iv) a systems view of the ideal statistical office; (v) implications of computer hardware and software for national statistical services; (vi) priorities - the keys to an integrated statistical system - unified surveys and censuses; (vii) panel on technical developments; and (viii) the statistical system of the 1980s - what can national statistical services do?

1	1977
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	Estimated duration (in years)	Estimated termination year
<u>WORK AREA 12.3: DEVELOPMENT AND HARMONIZATION OF ECONOMIC STATISTICS</u>		
12.3.1. <u>Development and linking of SNA and MPS national accounts and balances systems</u>		
<u>Description:</u> 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.		
<u>Method of work:</u> Continuation of the preliminary review of SNA and MPS; preparation of a paper on the clarifications, amplifications and modifications needed in the SNA (by the United Nations Statistical Office); meeting of the Working Party to review the SNA and MPS (1977/78); further work to be considered in the light of the results of the first stage of the review.		
	3	1980
Completion of the paper on the co-ordination of economic statistics with the national accounts and balances; circulation of the paper for comments; consideration of the paper by an informal meeting of national rapporteurs; preparation of a revised version of the paper for consideration at the twenty-fifth plenary session.		
	1	1977
12.3.2. <u>Promotion of publication and dissemination of internationally comparable statistics on production, national income and productivity</u>		
<u>Description:</u> 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		
<u>Description:</u> Multilateral comparison of the distribution of income and relative income differences in the countries participating in the project.		
<u>Method of work:</u> Completion of the analysis of the results of the national surveys (by Hungary, in consultation with the secretariat); informal meeting of the participating countries to agree on the report of the		

	<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
comparison and to consider the nature of the data to be published (beginning of 1977); submission of the report to the twenty-fifth plenary session.	1	1977
12.3.2.2. Other international comparisons		
<u>Description:</u> Comparison of consumption and capital formation (Austria/Poland) and other comparisons of corresponding aggregates.		
<u>Method of work:</u> Collection of national views on the subjects, participants and organization of a more systematic programme of international comparisons; preparation of proposals for such a programme, including proposals regarding the contribution which the Conference could make to the further stages of the ICP, for consideration at the twenty-fifth session (by the secretariat).	1	1977
Completion of the Austria/Poland comparison on consumption and capital formation; conduct of other comparisons of similar types.	5	1981
12.3.3. <u>Development and harmonization of statistical nomenclatures relating to economic activities and goods and services</u>		
<u>Description:</u> Participation in the work of the Statistical Commission on the preparation of international classifications relating to statistical activities and goods and services; harmonization of United Nations and CMEA classifications in these fields.		
12.3.3.1. International Standard Classification of All Goods and Services (ICGS)		
<u>Description:</u> Participation in the work of the Statistical Commission on the preparation of an international classification of all goods and services linked to the International Standard Industrial Classification (ISIC).		
<u>Method of work:</u> Submission of the relevant parts of the ICGS to the Meeting on Health Statistics.	1	1976
12.3.3.2. Conversion key between United Nations and CMEA standard classifications of economic activities		
<u>Description:</u> Study of the correspondence and development of a conversion key between the ISIC and the CMEA classifications of economic activities.		

	<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
<p><u>Method of work:</u> A study of the points of correspondence and differences between the ISIC and the CMEA classifications of economic activities; development of conversion keys between the corresponding classifications; testing of the conversion keys in terms of actual figures (by the secretariat in consultation with the Secretariat of CMEA, with the assistance of national rapporteurs and informal meetings as required).</p>	6	1982
<p>12.3.3.3. Conversion key between United Nations and CMEA standard classifications of goods and services</p> <p><u>Description:</u> Study of the correspondence and development of a conversion key between the United Nations and CMEA classifications of goods and services.</p> <p><u>Method of work:</u> Study of the points of correspondence and differences between United Nations 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).</p>	6	1982
<p>12.3.4. <u>Foreign trade statistics</u></p> <p><u>Description:</u> Study of selected subjects in the compilation of foreign trade statistics and their international comparability.</p> <p>12.3.4.1. Conversion key SITC/SFTC</p> <p><u>Description:</u> 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).</p> <p><u>Method of work:</u> Circulation of the revised draft correspondence table and draft key for comments; test of the draft key in terms of actual statistics; adaptation of the key to the SITC, Rev. 2; if necessary, a second consultation to finalize the key; and development of a correspondence key for the conversion of SITC data into SFTC categories.</p>	4	1980

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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12.3.4.2. Price and quantity statistics

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

Method of work: Analysis of further reports on national practices with regard to the measurement of prices and quantities in foreign trade (by the secretariat); further meeting, if required.

4	1980
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12.3.4.3. Country of origin and destination

Description: Study of the problems involved in the identification of country of origin and destination.

Method of work: Analysis of national practices on the basis of material available in the United Nations Statistical Office supplemented, if necessary, by information to be provided by countries (by the United Nations Statistical Office); further work to be considered at the twenty-fifth plenary session, in the light of plans for work at the world level.

4	1980
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12.3.5. Price and quantity statistics

Description: Study of problems in particular areas of price and quantity statistics in relation to the system of price and quantity statistics.

12.3.5.1. Statistics of producer (wholesale) prices

Description: Study of the methodological problems involved in the compilation of statistics of producer (wholesale) prices.

Method of work: Meeting on statistics of producer (wholesale) prices; pending the results of the meeting, no further work on this subject is proposed.

1	1976
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12.3.5.2. Statistics of consumer prices

Description: Study of the methodological problems involved in the compilation of statistics of consumer prices (jointly with ILO).

Method of work: Preparatory work for, and a meeting on, methodological problems in the compilation of statistics of consumer prices, the calculation of consumer price indices net of indirect taxes and subsidies, and problems of choosing appropriate deflators for calculating real income.

2	1978
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	<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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 this subject (or on the problems of measurement of prices and quantities in selected areas of services) for consideration at the twenty-fifth plenary session; further study of the methodological problems involved in the measurement of prices and quantities in services.	3	1979
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 the government.		
<u>Method of work:</u> Meeting on public sector statistics to consider the United Nations and IMF manuals, the proposals for the reconciliation of the two manuals, the draft extended classification of purposes of government, and a general guidance paper on the main issues arising in the field of public sector statistics. The meeting should also consider the need for a single set of recommendations in this field as a long-run objective. Further work is to be considered in the light of the results of this meeting.	2	1978
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> Preparation of a European Handbook of Economic Accounts for Agriculture covering both SNA and MPS types of accounts and links between them, presenting		

	<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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); preparatory work for, and a meeting on, food consumption surveys.	1	1977
Preparatory work for, and a meeting on, production and utilization statistics (possible subjects: potatoes; sugar beet; sugar; tobacco; oil seeds; fibre crops; review of earlier recommendations on meat and milk balances).	2	1978
Study of problems involved in statistics of employment; and methodological questions relating to farm book-keeping data and the possibility of their harmonization with other agricultural statistics (the need for, and timing of, meetings on these subjects to be considered later).	3	1980
Preparation, as soon as resources permit, of a trilingual glossary of terms used in agricultural statistics.	4	1982

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 meeting on general energy statistics with the following terms of reference: (i) establishment of a general system of energy statistics on the basis of the existing Annual Bulletin of General Energy Statistics, covering extraction, conversion, transport and use of energy; (ii) evaluation of the data against these requirements; (iii) preparation of recommendations for the development and improvement of data needed at the national and regional levels, including the development and harmonization of the statistical publications of ECE in the field of energy. Further work to be considered in the light of the results of the meeting.

3 1979

12.3.7.3. Statistics of chemicals

Description: Co-operation with the Chemical Industry Committee of ECE in its work on the improvement and standardization of statistics relating to the chemical

	<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
industry, its raw materials and its markets, and the collection and publication of the statistics needed for the Committee's studies and other activities.		

Method of work: Preparatory work for, and a meeting on, statistics of chemicals (November 1976) with the following terms of reference: (i) review of the progress made and problems encountered in the collection and publication of data on exports and imports of chemical products; (ii) study of the problems involved in obtaining comparable data on production and trade.

1	1976
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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: Follow-up work on subjects discussed at the Seminar: (i) co-ordination of science statistics with the systems of national accounts and balances (by the ECE secretariat in co-operation with UNESCO, with the assistance of national rapporteurs, by correspondence and informal meetings as required); (ii) study of the work on science statistics carried out within the framework of the CMEA (by the UNESCO secretariat in co-operation with the Secretariat of 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); ad hoc meeting on the adequacy of present indicators of international flows of technology (1977).

2-3	1979
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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 listed above (1978 or 1979).

3	1979
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12.3.7.5. Statistics of tourism

Description: Preparation of international guidelines for statistics of tourism.

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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Method of work: Preparation of an inventory of national practices relating to the types of data collected, methods used, problems encountered and resources involved, covering both statistics of international tourism and statistics of domestic tourism, possibly as part of the material collected for the technical manual on statistics of tourism, if the Statistical Commission decides that such a manual should be prepared (by the United Nations Statistical Office); consideration of the need for a further meeting on statistics of international and domestic tourism at a later stage when sufficient progress has been made in the analysis of the information on national practices and the preparation of the manual.

2	1979
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12.3.7.6. Enterprise statistics

Description: Development of statistics for enterprise-type statistical units.

Method of work: Completion and circulation of paper on country practices (by the United Nations 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.

3	1979
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12.3.7.7. Statistics of fixed capital formation and stocks and related aspects of statistics of profits

Description: Study of problems involved in the collection of statistics on fixed capital formation, stocks and related aspects of profits.

Method of work: Preparatory work for, and a meeting on, statistics on capital formation and related aspects of profits with the following terms of reference: (i) review of concepts and methods of collecting and compiling data on gross and net fixed capital formation and depreciation; (ii) review of methods of evaluating changes in stocks; (iii) concepts and methods used for estimating profits and their relationship with concepts and methods used in estimates of capital formation from related sources; and, in so far as time permits, (iv) estimates of fixed capital formation and stocks at constant prices.

2	1978
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Estimated duration (in years)	Estimated termination year
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WORK AREA 12.4: DEVELOPMENT AND HARMONIZATION OF SOCIAL
AND DEMOGRAPHIC STATISTICS

12.4.1. System of Social and Demographic Statistics

12.4.1.1. Relationships within the System and with other systems

12.4.1.2. Common concepts, definitions and classifications

12.4.1.3. Social indicators

Description: Participation in the work of the United Nations 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 United Nations Statistical Commission on social indicators; and work on related subjects.

Method of work: Continuation of the work of the groups of rapporteurs on links among the different fields of the framework; links between the framework and the systems of national accounts and balances; and on the active sequence; preparation of a paper providing a general orientation on the work on the SSDS for submission to specialized meetings in the field of social and demographic statistics (by UNSO and the secretariat); continuation of the work on concepts, definitions and classifications (elaboration of key classifications, review of the classification of purposes of government); preparation of papers by national rapporteurs, international organizations or the secretariat on: (i) treatment of time in the SSDS (Poland, UNSO); (ii) compilation of statistics for client groups (if arrangements for the preparation of a national paper can be made); (iii) statistics for the study of social stratification and mobility (Hungary, in collaboration with Italy, Poland and Portugal); (iv) integration and organization of social and demographic data for multi-purpose storage and retrieval (UNSO); role of multi-subject surveys in the application of concepts of integrated data sets (United States); (v) an account of the work of the common development efforts relating to social indicators being undertaken by the OECD (OECD Secretariat); meeting of the Working Party to consider the reports of the groups of rapporteurs, the papers by national rapporteurs and the results of the work mentioned above (in 1978).

	<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
Further work on this project to be considered later in the light of the progress made and experience gained.	2	1980
12.4.2. <u>Development and harmonization of statistical nomenclatures in the field of social and demographic statistics</u>		
<u>Description:</u> 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 United Nations and CMEA classifications in the field of social and demographic statistics, and the preparation of conversion keys where required.		
<u>Method of work:</u> A comparative study of United Nations 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).	3	1980
12.4.3. <u>Selected problems in social statistics</u>		
<u>Description:</u> Preparation and revision of international recommendations in specific areas of social statistics; development of the relevant sub-systems of the System of Social and Demographic Statistics.		
12.4.3.1. <u>Manpower statistics</u>		
<u>Description:</u> Elaboration of the objectives and contents of the sub-system for earning activities of the System of Social and Demographic Statistics and 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 (jointly with ILO).		
<u>Method of work:</u> Preparatory work for, and a meeting on, manpower statistics to review the sub-system for earning activities of the SSDS and to review manpower statistics from various sources.	2	1978
12.4.3.2. <u>Health statistics</u>		
<u>Description:</u> Elaboration of the objectives and contents of the health sub-system of the System of Social and Demographic Statistics and the links between it and other sub-systems and with the systems of national accounts		

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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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: Completion of the preparatory work for, and a meeting on, health statistics to discuss: (i) the health sub-system of the SSDS and its links with other systems; (ii) development of economic accounts for health within the systems of national accounts and balances; (iii) a health classification suitable for use as a common classification in the SSDS; (iv) social indicators in the field of health; (v) classification of health services in the International Standard Classification of All Goods and Services (ICGS); and (vi) methods of collecting more comprehensive and reliable data on morbidity; further work to be considered in the light of the results of the meeting and the progress made in the work on the SSDS in general.

4

1980

12.4.3.3. Statistics of education

Description: Elaboration of the objectives and contents of the educational sub-systems of the System 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 (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 SSDS 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.

3

1979

12.4.3.4. Cultural statistics

Description: Development and improvement of cultural statistics; elaboration of the objectives and contents of the leisure sub-system of the System of Social and

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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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 the development of new standards for the statistics needed for meeting these requirements (jointly with UNESCO).

Method of work: Completion of an outline for a system of cultural statistics (by UNESCO) and circulation for comments (1976/77); second meeting on cultural statistics (1978); development of the contents of the system; third meeting on the system as a whole, if required.

4	1980
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12.4.3.5. Housing statistics

Description: Improvement and further development of housing statistics, with particular reference to the relationship between current housing statistics and housing censuses; review of implementation of the European recommendations for the 1970 housing censuses and preparation of recommendations for the 1980 censuses; elaboration of the contents of the housing sub-system of the SSDS and 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 (jointly with the ECE Committee on Housing, Building and Planning).

Method of work: Meeting on housing statistics to discuss (i) contents of the 1970 survey of the housing situation; (ii) the relationship between current housing statistics and housing censuses; (iii) the housing sub-system of the SSDS; and (iv) methodology for international comparisons in the construction field.

1	1976
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Completion of the analysis of practices followed in the 1970 housing censuses and preparation of draft recommendations for the 1980 censuses (by the secretariat); meeting to discuss the recommendations for the 1980 censuses (1976/77).

2	1977
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12.4.3.6. Statistics of crime and justice

Description: Study of requirements for statistics of crime and justice in relation to the relevant sub-system of the SSDS.

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	1980
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Estimated duration (in years)	Estimated termination year
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12.4.4. Selected problems in demographic statistics

Description: Preparation and review of international recommendations in specific areas of demographic statistics; development of the demographic sub-system of the System of Social and Demographic Statistics.

12.4.4.1. Migration statistics

Description: Participation in the work of the United Nations 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: Collection of more up-to-date and additional data on international migration for the further analysis of differences between data reported by countries of immigration and countries of emigration; meeting on migration statistics in 1977/78 with the following terms of reference: (i) to review the application of the revised recommendations for statistics of international migration; (ii) to consider the UNSO paper on statistics of internal migration; and (iii) to consider the results of the further analysis of differences between data reported by countries of immigration and countries of emigration and possible action to be taken with regard to a regular exchange of data.

2

1978

12.4.4.2. Fertility surveys

Description: Co-operation in the work of the ISI and the IUSSP on the preparation of the World Fertility Survey (WFS), with particular reference to the scope and contents of the surveys to be carried out by ECE and other low fertility countries.

Method of work: Consideration of, at annual plenary sessions, progress reports on the World Fertility Survey.

cont.

12.4.4.3. Demographic sub-system of the SSDS

Description: Elaboration of the objectives and contents of the demographic sub-system of the System 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.

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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Method of work: Preparatory work for, and a meeting on, the demographic sub-system of the SSDS.

2	1978
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12.4.4.4. Population censuses

Description: Review of implementation of the European recommendations for the 1970 population censuses; preparation of recommendations for the 1980 censuses.

Method of work: Completion of the analysis of practices followed in the 1970 population censuses and preparation of draft recommendations for the 1980 censuses (by the secretariat): meeting to discuss the recommendations for the 1980 censuses (1976/77).

2	1977
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12.4.4.5. 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 a meeting on, projections of households and families.

1	1980
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WORK AREA 12.5: DEVELOPMENT AND HARMONIZATION OF ENVIRONMENTAL AND RELATED STATISTICS

12.5.1. System of environmental statistics

Description: Study of the statistical requirements for environmental studies and policies; participation in the work of the United Nations 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 (jointly with the Senior Advisers to ECE Governments on Environmental Problems).

Method of work: Collection of information on national practices, experience, plans and priorities in data requirements in the field of environmental statistics; general meeting on environmental statistics to review the work on particular aspects (specific terms of reference to be considered later).

2	1978
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	<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
Further work to be considered later in the light of the results of future work in particular areas of environmental statistics and the programme of work on environmental statistics at the world level.	8	1984
12.5.2. <u>Selected problems in environmental statistics</u>		
<u>Description:</u> Study of methodological questions and problems of data collection in particular areas of environmental statistics.		
12.5.2.1. Materials/energy balances		
<u>Description:</u> Development of the materials/energy balances sub-system of a system of environmental statistics.		
<u>Method of work:</u> Consideration of the revised paper on materials/energy balances at a more general meeting on environmental statistics.	2	1978
12.5.2.2. Statistics on the quality of environment		
<u>Description:</u> Examination of the statistical requirements for studies on the quality of the environment.		
<u>Method of work:</u> Informal meeting on statistics for the study of the quality of the environment; preparation (by the secretariat) of a revised version of the paper in the light of the results of the meeting for consideration at a more general meeting on environmental statistics.	2	1978
12.5.2.3. Other subjects		
<u>Description:</u> Study of other aspects of environmental statistics.		
<u>Method of work:</u> To be considered later.		
12.5.3. <u>Regional statistics</u>		
<u>Description:</u> 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.		
<u>Method of work:</u> Promotion of closer co-operation among international organizations in their work on regional statistics by means of inter-secretariat consultations supplemented, if necessary, by consultations with individual countries; meeting to review the results of the inter-secretariat consultations and to consider other selected items in the long-term programme of work.	3	1979

13. - STEEL

Estimated duration (in years)	Estimated termination year
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WORK AREA 13.1: MEDIUM- AND LONG-TERM PERSPECTIVES

13.1.1. Long-term perspectives for the iron and steel industry

Description: At its annual sessions the Committee will continue to consider long-term prospects for the steel industry, the demand for steel products and the raw material and energy base for the steel industry, with a view to selecting specific issues for detailed studies.

Method of work: The Committee will consider these problems on the basis of studies and background papers, prepared periodically by the secretariat and/or by governmental rapporteurs, on specific aspects of long-term problems as defined by the Committee. A Meeting of Experts on Forecasting Methods to consider the possibility of devising a methodology for projection work on the steel industry will be convened [the date of the meeting to be decided by the Committee]. cont.

13.1.2. Interrelation between the iron and steel industry and the steel-consuming sectors

Description: The Committee will consider the effect of structural changes which have occurred during recent years in the steel industry and some main steel consuming sectors, on their present and future interrelation.

Method of work: A symposium on this subject will be held in Geneva in 1977. The Preparatory Meeting for this Symposium was held in June 1976; the second Preparatory Meeting is scheduled for March 1977.

1	1977
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13.1.3. Co-operation with Senior Economic Advisers to ECE Governments on the Overall Economic Perspective for the ECE Region up to 1990

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

	Estimated duration (in years)	Estimated termination year
<p><u>Method of work:</u> 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.</p>	2	1978
<p><u>WORK AREA 13.2: CURRENT DEVELOPMENTS AND PROSPECTS, INCLUDING INTERNATIONAL TRADE</u></p>		
<p>13.2.1. <u>Short-term trends and problems in the steel industry and the steel market</u></p>		
<p><u>Description:</u> 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.</p>		
<p><u>Method of work:</u> 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.</p>	cont.	
<p><u>WORK AREA 13.3: SELECTED ECONOMIC AND TECHNOLOGICAL PROBLEMS</u></p>		
<p>13.3.1. <u>Structural changes in the iron and steel industry, including plant location problems</u></p>		
<p><u>Description:</u> The Committee will consider economic, financial and technological problems which have an impact on changes in the structure of the iron and steel industry. Changes in size of plant, enterprises and groupings and the geographical-locational problems will also be examined.</p>		
<p><u>Method of work:</u> Under the guidance of the Group of Experts on Structural Changes in the Iron and Steel Industry, the secretariat is preparing the study taking, as its background, the information received from the ECE member countries and on the basis of a questionnaire.</p>	2	1977

Estimated duration (in years)	Estimated termination year
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13.3.2. Increasing use of continuous processes in the iron and steel industry

Description: The Committee will undertake a study on technical and economic aspects of the present situation of, and the prospects for, the development of continuous steel making, continuous casting and continuous rolling processes.

Method of work: The study will be prepared by the secretariat and government rapporteurs appointed by the interested countries for discussion at the next ad hoc Meeting of Experts, to be held in March 1977. The necessary material for the study will be submitted by the countries.

2	1978
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13.3.3. 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: [To be established by the Committee.]

2	1982
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13.3.4. Economic and technical aspects of the application of computer techniques in iron and steel making processes

Description: The Committee will consider the present and prospective developments in the application of computer techniques in different iron and steel making processes.

Method of work: A seminar dealing with this subject will be held in Czechoslovakia in 1978. A Preparatory Meeting for this Seminar will be held in 1977.

1	1978
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13.3.5. Raw materials for steel making

13.3.5.1. Techno-economic problems in the use of scrap in the iron and steel industry

Description: The Committee will examine sources, preparation and classification of scrap, economic and technical factors affecting materials balances in the iron and steel industry, and also the scrap market and its future prospects.

	Estimated duration (in years)	Estimated termination year
<u>Method of work:</u> Under the guidance of a group of experts, the study will be prepared by the secretariat, assisted by government rapporteurs.	2	1978
13.3.5.2. Utilization of low-grade iron ores		
<u>Description:</u> Problems of efficiency of utilization of ores and technological use, resources of iron ores including low magnetic ores, will be considered by the Committee.		
<u>Method of work:</u> [The implementation of this project to be decided by the Steel Committee.]	2	1980
13.3.5.3. Production and supply of metallurgical coke		
<u>Description:</u> [To be defined by the Steel Committee.]		
<u>Method of work:</u> [To be defined by the Steel Committee.]	2	1980
13.3.6. <u>Economic problems related to the creation of steel plants using direct reduction</u>		
<u>Description:</u> The Committee will consider in which way this topic will be analysed, taking into account the results of the Bucharest Seminar, 1976.		
<u>Method of work:</u> [The Steel Committee will decide on the implementation of this project.]	2	1980
13.3.7. <u>Steel use in public works, infrastructure and construction</u>		
<u>Description:</u> [To be defined by the Steel Committee.]		
<u>Method of work:</u> The seminar on this subject will be held in Luxembourg in 1979. The Preparatory Meeting for the Seminar will be convened in 1978.	1	1979
WORK AREA 13.4: <u>ENVIRONMENTAL AND RESOURCE-SAVING PROBLEMS</u>		
13.4.1. <u>Low-waste and non-waste technology in the iron and steel industry</u>		
<u>Description:</u> The Committee will consider ways in which it could contribute to the examination of the problem of low-waste and non-waste technology in the iron and		

Estimated duration (in years)	Estimated termination year
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steel industry, that is being undertaken by the Senior Advisers to ECE Governments on Environmental Problems. The purpose of the study will be to investigate the possibilities and limitations of industrial operation considering all relevant waste problems.

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	1978
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13.4.2. Protection against air and water pollution arising in the iron and steel industry

Description: As a follow-up to its study on "Problems of Air and Water Pollution Arising in the Iron and Steel Industry", the Steel Committee will examine problems related to new and additional sources of pollution resulting from the employment of new processes, higher point concentration of pollutants and the progressing industrial expansion. Particular attention will be directed to abatement methods and cleaning facilities.

Method of work: The secretariat will keep the Committee informed of the relevant activity of the Senior Advisers to ECE Governments on Environmental Problems and will prepare the necessary documentation which the Committee will require for its consideration of these problems.

2	1981
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WORK AREA 13.5: INDUSTRIAL CO-OPERATION

13.5.1. Product specialization, including standardization in the iron and steel industry

Description: [To be defined by the Steel Committee.]

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

2	1981
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<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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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. Bulletin 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.

14. - TIMBER

Estimated duration (in years)	Estimated termination year
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WORK AREA 14.1: MEDIUM AND LONG-TERM TRENDS AND PERSPECTIVES

14.1.1. Review of projections made in study 'Timber Trends and Prospects in Europe, 1950-2000' 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, 14.1.4, 14.2.1). In addition the secretariat will prepare an overall study which will compare real trends up to 1980 with projections.

cont.

14.1.2. Trends in the utilization of forest products in specific end-use sectors

Description: The Committee will review periodically the utilization of forest products in specific end-use sectors (e.g. construction, furniture, packaging, railway sleepers, mining timber) as part of the continuing analysis of trends in forest products markets intended to provide Governments with data necessary for the elaboration of their forest products policy in the light of prevailing demand conditions.

Method of work: The secretariat will prepare studies based on questionnaire returns. The Committee will determine the timing of studies and the choice of subjects on the basis of the results of project 14.5.2.7.

cont.

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

14.1.3.1. The wood-based panels industries

	<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
<p><u>Description:</u> 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.</p>		
<p><u>Method of work:</u> The secretariat will prepare a study, based on questionnaire returns, in conjunction with the regular medium-term surveys of the markets for wood-based panels (project 14.1.4.) scheduled for 1977, 1980 and at three-year intervals.</p>		
14.1.3.2. The sawmilling industry		cont.
<p><u>Description:</u> 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 on international conditions.</p>		
<p><u>Method of work:</u> The secretariat will prepare a study, based on questionnaire returns, in conjunction with the medium-term survey of markets for sawnwood and sawlogs scheduled for 1978. The Committee will determine whether such studies should in future be undertaken on a regular basis.</p>		
14.1.4. <u>Medium-term trends in the markets for specific forest products</u>	2	1978
<p><u>Description:</u> 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 forest products markets of the ECE region.</p>		
<p><u>Method of work:</u> The secretariat will prepare one study annually, on a three-year rotation of subjects, as follows: Wood-based panels: 1977, 1980, etc., Sawnwood and sawlogs: 1978, 1981, etc., Pulpwood (including residues and chips), pitprops and miscellaneous roundwood: 1979, 1982, etc. The 1980 study will pay special attention to the production and utilization of improved wood-based panels, with special reference to their surface covering.</p>		
		cont.

Estimated duration (in years)	Estimated termination year
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14.1.5. Relative long-term price trends of forest products and alternative materials

Description: The Committee will review long-term price developments in different countries, both of specific forest products and of alternative materials, in order to keep under review the competitive position of forest products, to provide Governments with guidance for the formation of their policies for investment in forestry and the forest industries and to examine the validity of the assumptions on prices of the study of timber trends and prospects in Europe, 1950-2000.

Method of work: A study will be prepared on the basis of data collected in connexion with pilot studies in selected countries and submitted to the Joint FAO/ECE Working Party on Forest Economics and Statistics, which will decide at its eleventh session, scheduled for 1977, what further work should be undertaken.

cont.

WORK AREA 14.2: CURRENT MARKET DEVELOPMENT AND SHORT-TERM PROSPECTS, INCLUDING PROBLEMS RELATING TO INTERNATIONAL TRADE

14.2.1. Review of production, trade, consumption and prices of forest products

Description: The Committee will analyse on a continuous basis, short-term trends in the production, trade and prices of forest products and forecast short-term prospects, with a view to providing Governments and the forest products sector with accurate and up-to-date information and assessments, necessary for an orderly development of the supply-demand mechanism.

Method of work: The secretariat will prepare and publish annually a review of trends in forest products markets over the previous year, based on data supplied by Governments in connexion with projects 14.2.1.1. and 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

Estimated duration (in years)	Estimated termination year
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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. Selected problems in rationalizing the transport and handling of forest products

Description: The Committee will review the situation as regards transport and handling of forest products and recommend any action it considers necessary with a view to increasing the efficiency of these activities and thus facilitating international trade.

Method of work: The Committee will base its annual review on a report and, if necessary, recommendations by its co-ordinator for transport and handling.

cont.

14.2.3. Selected problems of standardization in the field of forest products, including classification and definitions

14.2.3.1. Review of standardization activities

Description: The Committee will review at its annual session needs and priorities for standardization in the field of forest products and decide what activities it should undertake, with a view to facilitating international trade in forest products, by removing non-tariff barriers, and to furthering the rational and economic use of wood.

Method of work: The Committee will base its annual review on a report, and if necessary, recommendations by its co-ordinator in the field of standardization.

cont.

14.2.3.2. Revision of FAO Classification and Definitions of Forest Products

Description: The Joint FAO/ECE Working Party on Forest Economics and Statistics will revise the FAO Classification and Definitions of Forest Products, with a view to ensuring that it is in harmony with other international multi-sector classifications and definitions.

Estimated duration (in years)	Estimated termination year
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Method of work: An ad hoc meeting, under the auspices of the Joint Working Party, will revise the FAO Classification and Definitions of Forest Products (advance version already published) when the revision of the major international classifications at present in progress, is complete (e.g. SITC, BTN, ICGS).

2	1979
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14.2.3.3. Classification and definitions of wood residues

Description: The Committee will harmonize national classifications and definitions of wood residues and of wood after its first use, with a view to facilitating international comparisons as well as analyses of the wood supply situation at the regional level.

Method of work: The Joint FAO/ECE Working Party on Forest Economics and Statistics will decide at its eleventh session how this work should be carried out

3	1980
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14.2.3.4. Standardization of stress grading of structural coniferous sawn timber

Description: The Committee will prepare an ECE recommended standard for the stress grading of structural coniferous sawn timber, with a view to ensuring the rational and economic use of sawn softwood and to facilitating international trade in structural coniferous sawn timber.

Method of work: An ad hoc meeting will prepare an ECE recommended standard on the basis of the draft already prepared (TIM/WP.3/AC.3/6/Add.1), and comments received thereon from countries, concentrating on the level of knot area ratio (KAR) in the ECI grade and the limits for distortion. This recommended standard will be submitted for approval to the thirty-fifth session of the Committee.

1	1977
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14.2.3.5. Standardization of structural finger-jointing in coniferous sawn timber

Description: The Committee will prepare a standard for structural finger-jointing in coniferous sawn timber, with a view to ensuring the rational and economic use of wood and to facilitating international trade in structural finger-jointed timber.

	Estimated duration (in years)	Estimated termination year
<p><u>Method of work:</u> An <u>ad hoc</u> meeting will prepare an ECE recommended standard on the basis of the draft prepared in 1976 and of comments received thereon from countries. This recommended standard will be submitted for approval to the thirty-fifth session of the Committee.</p>	1	1977
<p>14.2.3.6. Reduction of the number of standard dimensions of sawnwood entering international trade</p> <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 <u>ad hoc</u> meeting in 1977 will give preliminary consideration to the problem and prepare proposals for methods of work for the Committee's thirty-fifth session.</p>	3	1980
<p>14.2.4. <u>Rationalization of the flow of forest products from the forest to the consumer</u></p> <p><u>Description:</u> The Committee will review the international distribution chain for forest products, from the forest to the consumer, with a view to identifying any areas where the Committee might undertake specific action.</p> <p><u>Method of work:</u> A special lecture will be delivered to the thirty-sixth session of the Committee, scheduled for 1978, analysing the distribution chain. In the light of this lecture, the Committee will decide on a future course of action.</p>	2	1979
<p><u>WORK AREA 14.3: SELECTED ECONOMIC, TECHNOLOGICAL AND MANAGERIAL PROBLEMS</u></p>		
<p>14.3.1. <u>Forest working techniques and training of forest workers</u></p>		

(This project is covered by the activities of the Joint FAO/ECE/ILO Committee on Forest Working Techniques and Training of Forest Workers, which reviewed its programme and methods of work at its eleventh session in June 1976. The project components set out below reflect the structure of the Joint Committee's programme, as approved at its tenth session. It will be necessary to revise them, in the light of the decisions of the eleventh session, when the process of restructuring of the Joint Committee's programme and methods of work is complete.)

Estimated duration (in years)	Estimated termination year
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14.3.1.1. Methods and organization of forest work

Description: The Joint Committee will study selected problems of methods and organization of forest work, with a view to using resources of labour and capital in the most efficient way and minimizing costs of forest work.

Method of work: The Study Group on Methods and Organization of Forest Work will meet biennially (1977, 1979, 1981, etc.) to recommend to the Joint Committee problems on which work is needed and to carry out specific projects.

cont.

14.3.1.2. Vocational training and prevention of accidents

Description: The Joint Committee will study selected problems of vocational training and prevention of accidents in forest work, with a view to improving national policies and regulations by the exchange and dissemination of information in this field.

Method of work: The Study Group on Vocational Training and Prevention of Accidents in Forest Work will meet biennially (1977, 1979, 1981, etc.) to recommend to the Joint Committee problems on which work is needed and to carry out specific projects.

cont.

14.3.1.3. Mechanization of forest work

Description: The Joint Committee will study selected problems of mechanization of forest work with a view to enabling Governments to adapt their policies to changing economic and environmental constraints by the exchange and dissemination of information in this field.

Method of work: The Study Group on Mechanization of Forest Work will meet biennially (1978, 1980, 1982, etc.) to recommend to the Joint Committee problems on which work is needed and to carry out specific projects.

cont.

14.3.1.4. Dissemination and exchange of information

Description: The Joint Committee will further the dissemination and exchange of information in selected areas related to the economic, social, technical and environmental aspects of its work in order to provide guidance to Governments in the field of forest working techniques and the training of forest workers.

	Estimated duration (in years)	Estimated termination year
<p><u>Method of work:</u> The Joint Committee will draw up a programme of seminars, symposia and training courses at its biennial sessions (1978, 1980, 1982, etc.). A symposium will normally be held in conjunction with the Joint Committee session.</p>	cont.	
14.3.2. <u>Behaviour of wood products in fire</u>		
<p><u>Description:</u> The Committee will further an exchange of information on the behaviour of wood products in fire, with a view to promoting the safe, rational and economic use of wood and to identifying areas where the Committee might undertake action, notably as regards harmonization of building regulations and other standards concerning the fire resistance of wood products.</p>		
<p><u>Method of work:</u> A seminar will be held in March 1977, in Oxford (United Kingdom).</p>	1	1977
14.3.3. <u>Utilization of tropical hardwoods</u>		
<p><u>Description:</u> The Committee will review the utilization of tropical hardwoods with a view to analysing patterns and trends in the demand for these products and to identifying opportunities for expanding trade with developing countries.</p>		
<p><u>Method of work:</u> The secretariat will prepare and publish a study on the trade and utilization of tropical hardwoods. A seminar will be held in 1979 (offers to act as host country are invited).</p>	3	1979
14.3.4. <u>Effects of taxation on forest management and wood supply</u>		
<p><u>Description:</u> 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.</p>		
<p><u>Method of work:</u> The Committee will determine the method of work in the light of preliminary consideration of the subject at the eleventh session of the Joint FAO/ECE Working Party on Forest Economics and Statistics in 1977.</p>	2	1979

Estimated duration (in years)	Estimated termination year
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14.3.5. Economic and technical developments in the furniture industry

Description: The Committee will further the exchange of information on economic and technical developments in the furniture industry, with a view to assessing in quantitative and qualitative terms the use of forest products in that industry and the trends and prospects in the demand for forest products for that sector.

Method of work: A symposium will be held in Poland in 1979. A preparatory meeting, organized with the help of government rapporteurs, will be held in 1977 or 1978.

3	1979
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14.3.6. Modernization in the wood-based panels industries

Description: The Committee will further the exchange and dissemination of scientific, technological and economic information on modernization in the wood-based panels industries.

Method of work: A symposium will be held in 1980, in collaboration with the Chemical Industry Committee (offers to act as host country are invited).

1	1980
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14.3.7. Investment and investment needs in the forestry and wood-processing sector

Description: The Committee will assess trends in investment in the forestry and wood-processing sector in order to determine the effect of this factor on wood supply in the ECE region and to provide Governments with guidance for their investment policies.

Method of work: The Committee will determine the method of work in the light of a special lecture to be delivered to its thirty-fifth session in 1977.

2	1979
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14.3.8. Review of progress made in the chemical processing of wood (other than for pulp and paper) and the potential of the use of wood for chemical products

Description: In conjunction with the Chemical Industry 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

Estimated duration (in years)	Estimated termination year
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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: The secretariat will prepare a report on what studies have been undertaken on the subject at the international level and present this report to the Committee's thirty-sixth session in 1978. The Committee will then decide on a course of action.

3	1980
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WORK AREA 14.4: ENVIRONMENTAL AND RESOURCE CONSERVATION PROBLEMS

(All the Committee's activities in this work area will be carried out in co-operation with the senior Advisers to ECE Governments on Environmental Problems.)

14.4.1. Quantification and evaluation of the environmental benefits of forests

Description: The Joint FAO/ECE Working Party on Forest Economics and Statistics will examine methods of quantifying and evaluating the environmental benefits of forests with a view to assessing forests' contribution to society, to calculating compensation for the environmental services of forests and to facilitating comparisons between countries.

Method of work: Work will be carried out according to the recommendations of the Joint FAO/ECE Working Party on Forest Economics and Statistics at its eleventh session in 1977.

2	1979
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14.4.2. Reduction of waste and development of use of residues in forestry, the wood processing industries and in forest products utilization

Description: The Committee will assess ways of reducing waste and developing the use of residues in forestry, the wood-processing industries and in forest products utilization in order to further rational use of the forest resource.

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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Method of work: A symposium will be held in 1981.
(Offers to act as host country are invited).

1	1981
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14.4.3. Effects of pollution on vegetation

Description: The Committee will assess the effects of different types of pollution on vegetation with a view to improving the protection of the forest resources of the ECE region against such damage.

Method of work: A symposium will be held in 1978 in Poland, jointly with the Committee on Agricultural Problems and in co-operation with the Senior Advisers to ECE Governments on Environmental Problems and UNEP. A preparatory meeting will be held in 1977, subject to approval by the other bodies involved.

1	1978
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14.4.4. Efficiency in energy use in forestry and the wood-processing industries

Description: The Committee will study energy use in forestry, the wood-processing industries and the use of forest products, with a view to identifying means to improve energy efficiency.

Method of work: A symposium will be held in 1978, with a preparatory meeting in 1977 (offers to act as host country are invited).

1	1978
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WORK AREA 14.5: COLLECTION, EXCHANGE AND DISSEMINATION OF INFORMATION INCLUDING IMPROVEMENT AND HARMONIZATION OF STATISTICS (IN CO-OPERATION WITH FAO)

14.5.1. Timber Bulletin for Europe

Description: The Committee will collect statistics on production, trade and prices of forest products, with a view to providing Governments and the forest products sector with data on the basis of which to formulate policies and make decisions.

Method of work: The secretariat will publish the Timber Bulletin for Europe twice a year, containing quarterly statistics on production, trade and prices of forest products, collected from Governments by means of quarterly questionnaires.

cont.

Estimated duration (in years)	Estimated termination year
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14.5.2. Selected problems of economics and statistics of forestry and forest products

This project is covered by the activities of the Joint FAO/ECE Working Party on Forest Economics and Statistics which normally meets biennially (1977, 1979, 1981, etc.). It co-operates with the Conference of European Statisticians.

14.5.2.1. Comparability of statistics

Description: The Working Party will improve international comparability in selected areas of statistics in order to ensure that the data used by Governments for international comparisons and by the Committee in its analyses are as accurate and comparable as possible.

Method of work: The Working Party will collect information in each area by means of questionnaires and studies and formulate recommendations to Governments, which will be submitted to the Committee for approval. The Working Party will propose series for which such action is necessary.

cont.

14.5.2.2. Organization and periodicity of statistical data collection and dissemination

Description: The Working Party will review periodically the Committee's programme of collection and dissemination of statistical data, to ensure that it corresponds with the needs of Governments.

Method of work: The Working Party will review periodically the Committee's programme of collection and dissemination of statistical data and make recommendations to improve its organization, coverage and periodicity.

cont.

14.5.2.3. Conversion factors

Description: The Working Party will review the conversion factors for forest products applicable to individual countries, in order to facilitate international comparison of yields and to ensure that the conversion factors used by the secretariat in its analyses reflect current technology.

Method of work: The Working Party will review at four-yearly intervals (1977, 1981, etc.) conversion factors communicated by Governments in reply to a questionnaire.

cont.

14.5.2.4. Forest resource analysis

Description: The Working Party will review methods of forest inventory used by Governments and by the secretariat to ensure that all parameters relevant to measuring the

<u>Estimated duration (in years)</u>	<u>Estimated termination year</u>
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productive potential of the forest, both for wood and non-wood benefits, are taken into account and that the methods adopted correspond as closely as possible to the needs of all the users.

Method of work: The Working Party will determine methods of work at its eleventh session in 1977.

2	1979
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14.5.2.5. Cost and price statistics

Description: The Working Party will improve the coverage of the statistics on costs and prices published in the Timber Bulletin for Europe.

Method of work: Series of cost and price statistics will be published in the light of the recommendations of correspondents nominated by Governments.

1	1977
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14.5.2.6. 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: A pilot questionnaire will be compiled by government rapporteurs for the Working Party's eleventh session in 1977. A study will be compiled on the basis of returns to this questionnaire, modified, if necessary, by the Working Party.

2	1979
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14.5.2.7. End use statistics

Description: The Working Party will review the coverage and availability of statistics on the end-uses of forest products, with a view to improving the data base for the Committee's work in this area (see 14.1.2.).

Method of work: The Working Party will decide on a method of work at its eleventh session, scheduled for 1977.

3	1980
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14.5.3. Dissemination and exchange of general information and experience

Description: The Committee will further the dissemination and exchange of information and experience on selected themes within its area of competence, by organizing annual study tours at the invitation of the countries concerned with a view to making available to Governments and the forest products sector experience gained in individual countries.

Method of work: In 1977, a study tour will be organized in Italy; in 1978, in Poland. (Offers to organize a study tour in other years are invited).

15. - TRADE

Estimated duration (in years)	Estimated termination year
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WORK AREA 15.1: ANALYSIS AND REVIEW OF RECENT AND PROSPECTIVE TRADE TRENDS, POLICIES AND PROBLEMS

15.1.1. Review of short- and long-term trade trends, prospects and policies: changes and problems affecting intra-regional trade

Description: The Committee will review, at its annual sessions, trade trends and prospects with a view to exchanging information and experience useful to policy-makers in formulating their economic and trade policies. It will, at the same time, examine changes and problems in trade policies affecting intra-regional trade with a view to obtaining accurate and up-to-date information on the general policy framework affecting the development of trade.

Method of work: Participants in the annual sessions of the Committee will give accounts of bilateral and regional developments of relevance to trade between member countries, and will review recent trends, policies and problems in intra-regional trade including general trade problems of the member countries which are developing from the economic point of view. Reviews will also be presented by the secretariat, inter alia, in the Economic Bulletin for Europe for consideration by the Committee. A special chapter in the Bulletin will be devoted to trends, policies and problems in the development of trade of the latter member countries.

cont.

15.1.2. Review of the effects of structural changes in economic sectors or branches as well as of technological progress on the composition and geographical patterns of trade

Description: The Committee will examine these effects and will exchange information and experience useful to policy-makers in formulating their economic and trade policies.

Method of work: A study will be prepared by the secretariat for consideration by the Committee at its twenty-eighth session. An annotated outline will be submitted to the Committee for prior consideration at its twenty-seventh session.

Estimated duration (in years)	Estimated termination year
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15.1.3. Review of trade and economic co-operation agreements

Description: The Committee will examine progress made and techniques used in these agreements with a view to exchanging relevant information and experience.

Method of work: Participants in the annual sessions of the Committee will comment on these agreements. The secretariat will propose studies for consideration by the Committee as requested.

cont.

15.1.4. Review of developments in sub-regional economic groupings affecting intraregional trade

Description: The Committee will consider these developments in order to exchange information and experience and to identify problems.

Method of work: A study will be prepared by the secretariat for consideration by the Committee at its twenty-ninth session. An annotated outline will be submitted to the Committee for prior consideration at its twenty-seventh session.

3 1980

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 interregional trade and, in particular, in trade with developing countries.

Method of work: Studies on selected problems, as determined by the Committee, for consideration at any of its sessions, will be prepared by the secretariat in co-operation with the secretariat of UNCTAD, of the other regional economic commissions or of other bodies in the United Nations system on the basis of their relevant decisions and of studies prepared by them.

15.1.6. Co-operation with the Senior Economic Advisers to ECE Governments on the Overall Economic Perspective for the ECE Region up to 1990

Description: The Committee will consider and comment upon the Overall Economic Perspective elaborated 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.

Estimated duration (in years)	Estimated termination year
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Method of work: The secretariat will prepare for the Committee's consideration the necessary documentation and will assist it in carrying out the work on this project.

2	1973
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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 contents 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 also submit relevant information concerning these agreements, for consideration at the Committee's annual sessions.

cont.

15.1.8. Study on the possibilities of creating a multilateral system of notification of laws and regulations concerning foreign trade and changes therein

Description: The Committee will examine the possible scope and functioning of such a system in order to assess whether its creation would be practicable and desirable.

Method of work: The Executive Secretary will convene a preliminary ad hoc Meeting of Experts from member Governments and from selected international organizations with experience in such systems during the first half of 1977, for the purpose of defining the scope and most appropriate directions of inquiry for a revised and complete feasibility study. The Executive Secretary may convene additional ad hoc meetings as necessary to complete the study, and will present an interim progress report to the Committee at its twenty-sixth session.

1	1977
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Estimated duration (in years)	Estimated termination year
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WORK AREA 15.2: IDENTIFICATION OF ALL KINDS OF OBSTACLES
TO THE DEVELOPMENT OF TRADE AMONG ECE
MEMBER COUNTRIES, ESPECIALLY IN EAST-
WEST TRADE, AND ENDEAVOURS TO REDUCE OR
PROGRESSIVELY ELIMINATE THEM GIVING DUE
ATTENTION TO MEASURES FOR THE PROMOTION
OF TRADE AND DIVERSIFICATION OF ITS
STRUCTURE

15.2.1. Maintenance of an up-to-date Inventory of all
kinds of obstacles to the development of trade

Description: To assist the Committee in its work towards identifying all kinds of obstacles to trade, an up-to-date Inventory of those obstacles will be maintained by the secretariat on the basis of information provided by Governments.

Method of work: Notification of appropriate information by ECE Governments to the secretariat by 31 May each year and notification of comments on such information by 30 September each year. The Committee will consider, at its annual sessions, an Inventory transmitted by the secretariat, based on these notifications. Governments are invited to present additional comments on notifications listed in the Inventory as presented in document TRADE/R.336 by 15 April 1977. A revised version will be prepared on the basis of these comments.

cont.

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 ECE for the reduction or progressive elimination of those obstacles. The revised version of the Inventory will be discussed by an ad hoc meeting of experts, which shall report to the Committee.

cont.

Estimated duration (in years)	Estimated termination year
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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 elaboration of agreed recommendations by the Committee. Background material will be prepared by the secretariat, as required, for consideration by the Committee.

cont.

15.2.4. Promotion, collection and dissemination of
economic, commercial and relevant administrative
information

Description: The Committee will consider, at its annual sessions, means of promoting, collecting, publishing and disseminating economic, commercial and relevant administrative information in order to create better conditions for the development of trade.

Method of work: Member Governments will submit a list annually by June 30 of the kinds of basic economic and commercial information they feel are needed to improve conditions for development of trade within the region. The secretariat will provide these lists and submit them to the Committee at its annual sessions. Background studies will be prepared by the secretariat, as required, for consideration by the Committee.

cont.

WORK AREA 15.3: THE DEVELOPMENT OF MARKET INFORMATION,
MARKETING TECHNIQUES AND IMPROVED
BUSINESS CONTACTS

15.3.1. International co-operation in the field of trade
promotion, including marketing

Description: The Committee will examine, at its annual sessions, means of developing and exchanging information and experience in the field of trade promotion, including marketing in order to facilitate the development of trade.

Estimated duration (in years)	Estimated termination year
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Method of work: Elaboration 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.

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 governmental experts and by the secretariat for consideration at Seminars; the proceedings, conclusions and recommendations of the Seminars will be widely disseminated. The Fourth Seminar on East-West Trade Promotion, Marketing and Business Contacts will be held on 22-24 March 1977 and will deal with particular aspects of marketing of capital and consumer goods.

1	1977
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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 material 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.

Estimated duration (in years)	Estimated termination year
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WORK AREA 15.4: PROMOTION OF TRADE THROUGH INDUSTRIAL CO-OPERATION

15.4.1. Analysis of short- and long-term trends and prospects for industrial co-operation

Description: The Committee will examine short- and long-term trends and prospects for industrial co-operation including all kinds of obstacles, ^{1/} with a view to exchanging information and experience useful to policy-makers in formulating 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 taking due account of the results of the ad hoc Meeting of Experts on Industrial Co-operation, will be prepared by the secretariat for consideration by the Committee at its twenty-sixth and twenty-seventh sessions.

2

1978

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 of Experts on Industrial Co-operation.

Method of work: Consideration by the Committee and/or by the ad hoc Meeting of Experts on Industrial Co-operation of relevant proposals and recommendations. Background material will be prepared by the secretariat, as required.

cont.

15.4.3. Examination of means of improving the provision of information to those concerned on general conditions of 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

^{1/} Obstacles to trade are dealt with in Work Area 15.2.

Estimated duration (in years)	Estimated termination year
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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 of experts will consider the existing international information channels and possible means of improving them. Relevant proposals and recommendations will be elaborated by the Committee.

cont.

15.4.4. Collection and dissemination of information relevant to 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 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 elaboration of appropriate proposals and recommendations by the Committee on the basis of studies by the secretariat. A special study will be made about the possibilities of publishing special country manuals, including costs.

cont.

15.4.5. Elaboration of a Guide for drawing up international contracts between parties associated for the purpose of executing a specific project, as a sequel to the Guide for drawing up international contracts on industrial co-operation

Description: A Guide for drawing up international contracts between parties associated for the purpose of executing a specific project will be prepared for the use of enterprises and institutions engaged in, or interested in concluding contracts on such associations of enterprises.

Method of work: Meetings of the Group of Experts on International Contract Practices in Industry, working on the basis of background documentation prepared by the secretariat and by government rapporteurs.

Estimated duration (in years)	Estimated termination year
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15.4.6. ECE symposia at International Trade Fairs

Description: Organization by ECE of special meetings or symposia for exchange of information in connexion with international fairs held in the ECE region.

Method of work: The secretariat will submit to the Committee at its twenty-sixth session, after consultations with Principal Subsidiary Bodies, a list of appropriate international fairs scheduled within the ECE region through 1980. The secretariat should also suggest possible topics for selected symposia to be organized under the auspices of the ECE in connexion with these fairs.

2

1970

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 elaboration 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 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 (FALPROC) in UNCTAD.

cont.

Estimated duration (in years)	Estimated termination year
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15.5.2. Preparation and periodic revision of guides and general conditions relating to contracts for international commercial transactions

Description: The Committee will follow the work on the preparation of general conditions relating to standard contracts for international commercial transactions in selected fields.

Method of work: The Committee will review annually the work undertaken in this field by the Group of Experts on International Contract Practices in Industry. The secretariat will keep the Committee informed of the work of other bodies such as the Group of Experts on International Trade Practices relating to Agricultural Products.

cont.

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.

3	1980
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15.5.4. Preparation of a Manual on licensing procedures and related aspects of a technology transfer

Description: The Committee, in co-operation with the Senior Advisers to ECE Governments on Science and Technology, will consider drawing 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 with the help of rapporteurs for consideration at an ad hoc Meeting of Experts to be convened jointly with the Senior Advisers to ECE Governments on Science and Technology.

2	1978
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Estimated duration (in years)	Estimated termination year
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15.5.5. Preparation of recommendations on arbitration clauses

Description: The Committee will follow relevant developments concerning international commercial arbitration and prepare recommendations on arbitration clauses as the need arises. The Committee will establish at intervals of four years the list of members of the Special Committee envisaged in Article IV of the European Convention on International Commercial Arbitration, 1961.

Method of work: The secretariat will provide background material, including suggestions for draft recommendations, as required. Care will be taken to avoid duplication between work pursued under this project and the work undertaken by the United Nations Commission on International Trade Law (UNCITRAL).

5	1981
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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 intraregional 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 intraregional 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.

cont.

15.6.2. Trade problems specific to the member countries of the ECE which are developing from the economic point of view and consideration of action in respect of identified problems

Description: The Committee, at its annual sessions, will identify and examine trade problems specific to the above-mentioned countries and will consider which 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.

Estimated duration (in years)	Estimated termination year
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15.6.3. Measures to improve trade promotion efforts of the member countries of the ECE which are developing from the economic point of view

Description: The Committee, at its annual sessions, will examine trade promotion efforts, undertaken by these countries in selected fields with a view to elaborating measures which could improve the effectiveness of their trade promotion.

Method of work: Studies will be prepared by the secretariat with the help of government rapporteurs and in co-operation, as appropriate, with UNCTAD and the International Trade Centre for consideration by the Committee. The secretariat in co-operation with the secretariats of UNCTAD and ITC will also provide assistance, at the request of the Governments concerned, in the trade promotion efforts of these countries, including the formulation of request for assistance from the UNDP either on a national or 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

Description: The Committee will examine the potential scope and methods of this co-operation with a view to elaborating 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.

3

1980

16. - WATER PROBLEMS

Estimated duration (in years)	Estimated termination year
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WORK AREA 16.1: LONG-TERM PROSPECTS AND PLANNING OF THE WATER ECONOMY

16.1.1. Review and analysis of existing situation and future prospects regarding the utilization of water resources and water pollution control in the ECE region

Description: The Committee will keep under review the present and prospective situation regarding water resources use and pollution control in the region, in order to promote co-operation between ECE Governments in water resources management by a systematic exchange of information and experience in this particular field.

Method of work: At each plenary session the Committee will exchange views on major trends and policies with regard to integrated water resources management. At three- to five-year intervals, Governments will prepare country monographs, including statistical data on water use, along common guidelines adopted by the Committee. The secretariat will prepare a consolidated report on the basis of country monographs. The next report will be prepared in 1979/1980.

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 report will be prepared on the basis of information provided by Governments, as well as of material contained in the proceedings of the Seminar on Long-Term Planning of Water Management. The report will be made available to the Senior Economic Advisers to ECE Governments for their comments and use in connexion with their elaboration of the Overall Economic Perspective for the ECE Region up to 1990. The Group of Experts on Aspects of Water Quality and Quantity will consider at its fifth session (1977) an outline of the report, prepared by the secretariat in co-operation with the delegation from Greece, which will subsequently be transmitted to the ninth session of the Committee for its consideration.

Estimated duration (in years)	Estimated termination year
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16.1.3. 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 ninth session]

3	1982
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WORK AREA 16.2: ECONOMIC PROBLEMS OF WATER MANAGEMENT

16.2.1. Selected water problems in islands and coastal areas with special regard to desalination and groundwater

Description: The Committee will consider water management questions which are of more direct interest to island countries and to those with coastal areas. In particular, attention will be paid to the rational planning of groundwater resources and the economic aspects of desalination, including the evaluation of progress made and its applicability under the conditions of the ECE region. The aim of the project will be to provide guidelines for the rational and economic use of groundwater resources and of desalination facilities.

Method of work: The Committee will convene a seminar in 1978 on this topic. A preparatory meeting will be held in 1977 to formulate the programme of the seminar.

2	1978
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16.2.2. Relationship between water and energy

Description: In considering the relationship between water resources availability and economic and social development, the Committee will focus its attention on the critical energy sector in order to achieve optimum use of available water resources by promoting, among ECE Governments, rational sharing of the hydroelectric potential and cooling capacity of watercourses in the framework of comprehensive water resources management planning, where due attention should also be paid to water needs other than energy, to water quality control and to the protection of the water-related environment.

Method of work: [To be completed by the Committee at its ninth session]

2	1979
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Estimated duration (in years)	Estimated termination year
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16.2.3. Economic instruments for rational utilization of water resources

Description: The Committee will exchange views and experience between ECE Governments in (i) the evaluation of the effectiveness of economic incentives in water supply and waste water disposal systems; (ii) influence of water prices on water utilization and water discharges; and (iii) methods of allocation and optimization of investments for water resources development; in order to promote more rational and economic utilization of water resources in ECE countries through the extensive use of these economic tools.

Method of work: A seminar on this subject will be convened in 1980 by the Committee after its programme has been formulated at a preparatory meeting to be held in 1979.

2	1980
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16.2.4. Economic aspects of the conveyance of water over long distances and the establishment of water grids

Description: The Committee will study the economic aspects of the conveyance of water over long distances and the establishment of water grids, in order to promote policies to overcome the imbalance in the economic growth of a particular region, due to water shortage, in relation to other regions where water might be abundant.

Method of work: [To be completed by the Committee at its ninth session]

3	1983
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16.2.5. Administrative and financial problems in river basin development and management

Description: The Committee will review present practices for the optimum management of water resources in river basin development, in order to select the administrative and financial arrangements applicable to different social and political systems.

Method of work: [To be completed by the Committee at its ninth session]

3	1984
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Estimated duration (in years)	Estimated termination year
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WORK AREA 16.3: ENVIRONMENTAL PROBLEMS OF WATER
MANAGEMENT 1/

16.3.1. Prevention and control of water pollution, in
particular of transboundary rivers and
international lakes

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 CSCE and to assist them at the request of all ECE member Governments sharing a particular water resource.

Method of work: The Committee will consider at its ninth session the proposals made by the Group of Experts on Aspects of Water Quality and Quantity at its fifth session on the basis of suggestions made by the secretariat. Particular account will also be taken of the recommendation made by the Seminar on Long-Term Planning of Water Management on the "promotion of co-operation for the elaboration of integrated long-term plans, including the harmonization of the long-term plans of the member countries sharing transboundary river basins and coastal areas". In this respect priority is to be given to technical and economic rather than legal aspects. The Senior Advisers on Environmental Problems will also be informed on this project.

cont.

16.3.2. Protection of the marine environment, in
particular of the Mediterranean Sea, 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 in 1975, the Committee will continue to consider these matters in order to promote international co-operation in this particular field and stands ready to consider any request for assistance in the work that is going on.

1/ This work area contains projects of which some aspects are also of interest to the Senior Advisers to ECE Governments on Environmental Problems. Arrangements will be made, as appropriate, for co-operation with the Senior Advisers, in order to avoid any unnecessary duplication.

Estimated duration (in years)	Estimated termination year
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Method of work: The Committee will consider at its ninth session a report prepared by the secretariat on possible future co-operation with UNEP in this field.

cont.

16.3.3. Unified methods for establishing 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 will undertake a study, using as background information the report on "Examination of the methods of establishing national protection standards for major water pollutants", prepared under the auspices of the Senior Advisers to ECE Governments on Environmental Problems. The delegation from Hungary will prepare a questionnaire on this subject for consideration by the fifth session of the Group of Experts on Aspects of Water Quality and Quantity.

3

1979

16.3.4. Criteria and methods for evaluating and comparing various technical and economic measures and their potential effectiveness in achieving required water quality

Description: The Committee will review the various technical and economic measures used by ECE Governments in water pollution prevention and control in order to provide policy- and decision-makers with some guidance for assessment of the effectiveness of these measures in achieving the water quality required.

Method of work: [To be completed by the ninth session of the Committee]

2

1979

16.3.5. Methods for estimating the damage caused by water pollution as well as the economic benefits of recreation and amenities associated with fresh inland waters

Description: The Committee will consider methods for estimating the economic impact of water pollution from different sources, including dispersed sources of pollution, as well as the economic benefits associated with fresh inland waters, in order to provide ECE Governments with methods and criteria for the assessment of the consequences of economic activity and technological development in the water-related environment.

Estimated duration (in years)	Estimated termination year
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Method of work: [To be completed by the Committee at its ninth session]

3	1981
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16.3.6. 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 specify some environmental indicators and to make recommendations to ECE Governments on concrete measures assuring an efficient protection of the environment in water resources development.

Method of work: [To be completed by the Committee at its ninth session]

3	1982
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16.3.7. Setting up and operating of water quality monitoring devices with special regard to automatic alarm systems

Description: The Committee will proceed with an exchange of information on available water quality monitoring devices, including records of operational experience, and will consider the requirements of water quality monitoring stations in respect of their characteristics, location, density and frequency of observations, with particular reference to automatic alarm systems, in order to provide grounds for international co-operation in setting up and operating of international monitoring systems, including automatic alarm systems for monitoring accidental pollution.

Method of work: [To be completed by the Committee at its ninth session]

3	1985
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WORK AREA 16.4: RESEARCH AND DEVELOPMENT

16.4.1. Application of systems analysis in water resources management

Description: The Committee will review present know-how in the application of systems analysis in water resources management, emphasizing the practical rather than theoretical aspects, in order to promote good decision-making in water management through a more extensive use of these mathematical tools.

Method of work: The Committee, at its seventh session, entrusted a task force of government rapporteurs with the preparation of a report on this subject.

2	1978
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Estimated duration (in years)	Estimated termination year
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16.4.2. Methods of assessment of fresh water resources and the improvement of their utilization, in particular by developing methods of production which are less polluting and lead to less consumption of fresh water

Description: The Committee will review and consider methods for assessing fresh water resources, as well as ways of improving their utilization, through inter alia administrative control systems supported by appropriate legislation, water pricing, and the development of convenient, reliable and inexpensive devices for water use, in order to make recommendations to ECE Governments regarding the proper and economic use of available water resources, giving consideration not only to increasing cost efficiency but also to ensuring optimum social benefits from water resources savings.

Method of work: The Committee will organize a seminar on this subject in 1979 and a preparatory meeting will be convened in 1978 to formulate the programme of the seminar.

2	1979
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16.4.3. 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: [To be completed by the Committee at its ninth session]

3	1980
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16.4.4. Techniques for the prevention of pollution arising from agricultural and animal husbandry

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 pollution originating from agricultural animal production and for protection against pollution from cattle breeding, in order to promote research 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. A preparatory meeting will be convened in 1980 to formulate the programme of the seminar.

2	1981
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Estimated duration (in years)	Estimated termination year
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16.4.5. Re-use of river water and use of treated domestic sewage

Description: The Committee will review the present situation as far as the re-use of river water and the use of treated domestic sewage for other purposes is concerned, in order to establish guidelines and promote joint research among ECE Governments for a more rational (economically and socially efficient) use of available water resources.

Method of work: [To be completed by the Committee at its ninth session]

3	1983
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