REPORT OF THE THIRTY-FOURTH SESSION
held at Geneva from 18 to 22 October 1976
As approved by the Committee

Table of contents

Introduction 1
Adoption of the Agenda 8
Election of officers 9
Matters arising out of the thirty-first session of the Commission 10
Activities of other international bodies relevant to the work of the Committee 15
Review of activities since the thirty-third session of the Committee:
(a) Eleventh session of the Joint FAO/ECE/ILO Committee on Forest Working Techniques and Training of Forest Workers 19
(b) Study tour in Spain 23
(c) Standardization activities, notably the ad hoc meeting on standardization of stress grading and finger-jointing of coniferous sawnwood 25
(d) Symposium on extending the use of wood residues (Bucarest, Romania) 30
(e) Study "European Timber Trends and Prospects 1950-2000" 32
(f) Transport and handling of forest products 35
Market review and prospects 36
Special lecture 45
Activities of other Principal Subsidiary Bodies of ECE of interest to the Timber Committee 48
Programme of work for 1977-1981 49
Other business 75
Adoption of the report of the Committee's session 76
Date of next session 77
Films 78

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Annex II - Timber Committee programme of work for 1977-1981

Introduction

1. The Timber Committee held its thirty-fourth session at Geneva from 18 to 22 October 1976. The session was attended by representatives from the following ECE countries: Austria; Belgium; Bulgaria; Byelorussian SSR; Canada; Czechoslovakia; Finland; France; German Democratic Republic; Germany, Federal Republic of; Greece; Hungary; Ireland; Italy; Netherlands; Norway; Poland; Portugal; Romania; Spain; Sweden; Switzerland; Ukrainian SSR; USSR; United Kingdom; United States of America; Yugoslavia. 1/

2. The following country attended under article 11 of the Commission's terms of reference: Brazil.

3. The following United Nations and specialized agencies were represented: International Labour Organisation (ILO); the Food and Agriculture Organization (FAO); UNCTAD/GATT International Trade Centre (ITC).

4. The following intergovernmental organization participated: the European Economic Community (EEC).

5. The following non-governmental organizations were represented: the International Organization for Standardization (ISO), the Organization of European Sawmilling Industries (OES), the European Confederation of Wood-working Industries (CEI-Bois) and the European Federation of Associations of Particle Board Manufacturers (FEBYP).

6. The Chairman of the Timber Committee, Mr. A. Madas (Hungary) opened the session and welcomed delegates.

7. The Committee paid homage to the memory of Mr. G. Hampson, for many years delegate of the United Kingdom and a former Chairman of the Committee.

Adoption of the Agenda (Item 1 of the Agenda)

8. The provisional agenda (ECE/TIM/8), presented by the Secretariat, was adopted.

Election of officers (Item 2 of the Agenda)

9. The Committee elected Mr. F. Palmer (United Kingdom) Chairman, and Mr. V. Nemtsov (USSR) and Mr. A. Proncillo (Italy) Vice-Chairmen. The Committee warmly thanked the outgoing Chairman and Vice-Chairman, Mr. A. Madas (Hungary) and Mr. J. Becker (Netherlands) for their devoted service to the Committee during their periods of office.

Matters arising out of the thirty-first session of the Commission (Item 3 of the Agenda)

10. The Committee was informed of the Commission's discussion of its work and took note of the resolutions and decisions of the Commission, on the basis of document TIM/R.25.

11. The delegations of Bulgaria, Byelorussian SSR, Czechoslovakia, German Democratic Republic, Hungary, Poland, Ukrainian SSR and USSR, drew the attention of participants at the Committee session to the USSR's proposal to hold all-European congresses on co-operation in the field of protection of the environment, development of transport

1/ Further details on participation may be obtained from the Secretariat: ECE/FAO Timber Division, Palais des Nations, CH-1211 Geneva 10 (Switzerland).
and energy. They also referred to Commission decision B (XXXI), adopted at the thirty-first session of the Commission, whereby the Commission suggested that member Governments study this proposal thoroughly in the light of the discussion at the thirty-first session and of the provisions of the Final Act of the Conference on Security and Co-operation in Europe, asked the Executive Secretary to circulate such views in regard to this proposal as member Governments may wish to communicate to him, drew to the attention of the relevant Principal Subsidiary Bodies of the Commission, including the Timber Committee, the topics suggested for discussion at the proposed congresses on questions of co-operation in the fields of protection of the environment, development of transport of energy and asked the Executive Secretary to submit to the thirty-second session of the Commission a report on the work already effected or under way in the Economic Commission for Europe in these fields. The same delegations noted the importance and opportuneness of the above-mentioned proposal. They considered it necessary that the Committee, being guided by Commission decision B (XXXI), should duly take into consideration in the work within its competence those topics which it is suggested should be discussed by the congresses proposed by the Soviet Union. They noted that the Timber Committee was already carrying out work which could be of interest to the proposed congresses, such as work on forests, wood and their role in the environment, including the environmental consequences of forest operations, and on transport and handling of forest products, including unconventional methods. These delegates expressed the opinion that the Committee, when discussing its programme of work, could take into account these important subjects and projects, which are of interest to member countries, and which could be used to prepare and hold the proposed all-European congresses. The delegations of Hungary and the USSR made a number of such concrete proposals.

12. The delegation of Romania re-iterated its support for the idea of organizing all-European congresses in the fields of environment, transport and energy. It also considered that these congresses should be a continuation of the Conference on Security and Co-operation in Europe, and should be organized on the basis of the relevant objectives, and taking account of the rules of procedure which are included in the Final Act of the Helsinki Conference.

13. The delegations of Canada, of the Netherlands - speaking also on behalf of the European Community - and of the United States of America drew the attention of the Committee to the fact that Commission decision B (XXXI) clearly set out the respective roles of member Governments, of the relevant Principal Subsidiary Bodies and of the Executive Secretary and that a further consideration by the Timber Committee of matters relating to the holding of all-European congresses is not called for at this time. They re-iterated the importance of implementing the Final Act of Helsinki in its entirety. In the view of these delegations, the instructions of the Commission contained in the resolutions and decisions of the thirty-first session, in particular Commission resolution 1 (XXXI) and its decision D (XXXI), are the pertinent guidelines for the Committee's activities.

14. In response to a question as to whether the Committee could discuss Commission decision B (XXXI), the Secretariat referred to operative paragraph 3 of that decision which "draws to the attention of the relevant Principal Subsidiary Bodies the topics suggested for discussion at the proposed congresses on questions of co-operation in the fields of the protection of the environment, development of transport, and energy". The Secretariat had complied with this provision by presenting document TIM/R.25. The Secretariat indicated that the manner of dealing with this decision was in the hands of the Committee.
Activities of other international bodies relevant to the work of the Committee
(Item 4 of the Agenda)

15. The Committee was informed of the results of the FAO Regional Conference for Europe held at Bucharest (Romania) in September 1976, notably as concerns the development of the less favoured rural regions in Europe, and land-use policies. The Committee agreed with the conclusion by the Conference that the many and various problems of land-use planning and land use in general justified the convening of a consultative meeting of experts representing the multi-disciplinary and multi-agency interests in this problem area, in order to identify such problems or problem areas in the land-use sector which could be of international interest or warrant international co-operation. In view of the long-term implications of land-use practices and planning procedures for the region's forestry programmes, the matter was considered to be of particular interest and urgency for the Timber Committee. The Committee, therefore, decided to recommend to the Executive Secretary the early convening of such a consultative meeting of experts as a first step for more integrated international action in this field.

16. The FAO representative informed the Committee of activities which might be of interest to it, notably the Committee on Forestry, the Committee on Forest Development in the Tropics both to be held in November 1976, the eighteenth session of the Advisory Committee on Pulp and Paper and the FAO Consultation on Woodpulp and Paper Demand, Supply and Trade, both to be held in Tunis in September 1977, as well as the programmes on the following subjects:

- forestry industries development, intended to stimulate the establishment of additional pulp and paper manufacturing capacity in developing countries;
- the promotion of trade in tropical timber, intended to broaden and improve the utilization of resources; and
- forest policy analysis, planning and statistics, concerned with the international statistics on trade, production and industry capacity and on trends in consumption in relation to forest resources.

17. The representative of the International Trade Centre (ITC) informed the Committee of work undertaken to create an international tropical timber bureau. The ITC had carried out preparatory work and a consultative meeting had been held from 27 September to 1 October 1976.

18. The Committee was also informed of the meeting to be held to promote investment and industrial co-operation in selected wood-processing countries, at Montreal (Canada) from 16 to 21 May 1977, sponsored jointly by the United Nations Industrial Development Organization (UNIDO) and the Canadian International Development Agency. The objective of this meeting is to facilitate, at the project level, the transfer of appropriate technology, capital goods, management and marketing skills, etc. from the industrialized to the developing countries.

Review of activities since the thirty-third session of the Committee (Item 5 of the Agenda)

(a) Eleventh session of the Joint FAO/ECE/ ILO Committee on Forest Working Techniques and Training of Forest Workers

19. The Committee was informed of the activities of the Joint Committee and of the results of its eleventh session which had been held at Hyvinkää (Finland) in June 1976, on the basis of its report (TIM/EFC/WP.1/5). A symposium on the harvesting of a larger part of the forest biomass had been held in conjunction with the eleventh session of the Joint Committee (report: TIM/EFC/WP.1/SEM.3/2), and was preceded by a study tour. The Timber Committee approved the Joint Committee's report and thanked the Government of Finland for the excellent organization of the session, symposium and study tour.
20. The Committee noted that the Joint Committee had reviewed its objectives and programme of work and had proposed modifications to its structure and methods of work (TIM/R.28/Add.3). The Timber Committee approved these proposals, which are set out below:

(1) abandon the present system of study groups;
(2) carry out the Joint Committee's programme of work through independent projects covering aspects of planning, methods, organization and techniques in the three main work areas of the Joint Committee, which are:
   I - Implementation of silvicultural and management operations (technical, economic and organizational aspects)
   II - Wood harvesting (technical, economic and organizational aspects)
   III - Human aspects of forest operations (ergonomics, safety, vocational training, working conditions)

A number of projects could be relevant to more than one of the above work areas (e.g. methods of payment), be of a general nature (e.g. environmental problems), or be syntheses or general reviews;
(3) implement these projects in different ways, i.e. through groups of experts, ad hoc meetings, symposia, individual studies, enquiries, seminars, training courses, study tours, etc.;
(4) clearly define and spell out the scope and objective of each project and determine in advance its duration and means of implementation;
(5) establish the Joint Committee's draft programme of work by a steering committee, composed of the Joint Committee's office holders, three co-ordinators - experts in the three main work areas - and three assistant co-ordinators; the steering committee would have the task of proposing the projects and of supervising their implementation;
(6) projects in the three main work areas to be more particularly the responsibility of co-ordinators;
(7) projects relevant to more than one work area, or of a general nature, to be more particularly the responsibility of the Chairman and three Vice-Chairmen;
(8) syntheses and general reviews to be dealt with by the Joint Committee itself, which can devote part of the session time to technical discussions;
(9) the Joint Committee to continue to meet every two years in order to:
   (a) elect its office holders and co-ordinators
   (b) examine, discuss and approve the programme of work proposed by the steering committee
   (c) ensure an adequate balance between the work in the three main work areas
   (d) synthetize the projects
   (e) transfer responsibility for individual projects to particular countries or groups of countries.
21. The Committee expressed its conviction that these changes would in no way lower the very high level of efficiency of the Joint Committee's work. It also stressed the importance of bearing in mind long-term planning objectives and needs in formulating projects for action.

22. The Committee noted that the FAO European Forestry Commission, the Joint Committee's other parent body, will examine these proposals at its next session, scheduled for 1977, so that a revised programme and methods of work can be drawn up at the Joint Committee's twelfth session, scheduled for 1978. The ILO will also be consulted before a revised version is prepared.

(b) Study tour in Spain

23. The study tour in Spain was held from 30 May to 8 June 1976. Participants from 15 countries attended and were acquainted with various forestry problems in Spain, the success achieved in afforestation and with the progress of the forest products industries. It was suggested that in future participants to Timber Committee study tours should be provided well in advance with a detailed programme and documentation.

24. The Committee expressed its gratitude to the Government of Spain for organizing the study tour and for the generous hospitality extended to participants.

(c) Standardization activities, notably the ad hoc meeting on standardization of stress grading and finger-jointing of coniferous sawnwood

25. The Committee took note of the report of the ad hoc meeting on standardization of stress grading and finger-jointing of coniferous sawnwood (TIM/WP.3/AC.3/6 and Addenda 1 and 2). The Committee was informed that the ECE recommended standard for the stress grading of coniferous sawnwood proposed by the meeting had not gained wide acceptance within the European trading community, notably as regards the limits for distortion and of knot area ratio (KAR) for the ECI grade. As it was unlikely that any standard could become widely accepted without the support of those who had to use it regularly, the Committee requested the Secretariat to arrange as soon as possible an informal meeting of a small drafting group, which would prepare revised proposals for the standard. These proposals should be circulated to countries whose comments on them, as well as any counter-proposals they considered necessary, would also be circulated. The ad hoc meeting should then be reconvened as soon as possible in order to prepare, on the basis of these proposals and comments a recommended standard on stress grading of coniferous sawn timber for submission to the Committee's thirty-fifth session. When reconsidering the recommended standard, the ad hoc meeting should concentrate on the two main points still at issue, namely distortion limits and the KAR level for the ECI grade.

26. The Committee noted that the meeting's discussions had on several occasions been hampered by the fact that insufficient advance notice had been given of proposals for major changes in the recommendations; it therefore decided that the reconvened ad hoc meeting and future meetings of this type should not accept proposals which had not been circulated well in advance of the meeting. Naturally this did not exclude the possibility of counter-proposals being formulated in the normal course of discussion. It was also necessary for the ultimate acceptance of the standard that all interests, notably producers, users, traders and regulatory agencies, be sufficiently represented during the preparation of the standard. The Committee therefore strongly urged member governments to ensure that:

- any major proposals they intended to make were transmitted to the Secretariat early enough to be circulated well before the meeting;
- their delegation to the forthcoming meeting was able to speak authoritatively for all groups concerned by the stress grading of coniferous sawn timber.
27. The Committee re-iterated its conviction that the recommended standard for the stress grading of coniferous sawn timber was of great importance, both for the rational and economic use of sawnwood and for the removal of obstacles to international trade. It therefore urged participants in the reconvened ad hoc meeting to make every effort to reach agreement on this complex subject, as failure to do so would jeopardize the success of future standardization activities, not only within the Timber Committee framework (e.g. on finger-jointing) but also in the wider field of building regulations. The Committee was informed that the Working Party on the Building Industry of the ECE Committee on Housing, Building and Planning, had expressed interest in the Committee's stress grading project as an integral and basic part of a larger programme to produce a code of design practice in the field of timber engineering.

28. The Committee welcomed the work carried out by the ad hoc meeting held in July 1976 for an ECE recommended standard on structural finger-jointing in coniferous sawn timber and noted that it had not been possible, for reasons of time, to discuss in detail the whole draft standard presented to the meeting. The ad hoc meeting, which had been reconvened on the subject of stress grading, should also therefore complete discussion of the draft recommended standard on structural finger-jointing in coniferous sawn timber and approve a version for submission to the Timber Committee at its thirty-fifth session. Work on the two subjects of stress grading and finger-jointing should be closely co-ordinated and sufficient time should be made available for each.

29. The Committee also took note of the ad hoc meeting's recommendations for further activities in the field of standardization, notably as regards the reduction of the number of dimensions of sawnwood entering international trade, end-use oriented standards for wood-based panels and the reviewing and updating of standards. The Committee agreed to discuss its future work in the field under item 9 of the agenda - Programme of work.

(d) Symposium on extending the use of wood residues

30. The Committee was informed of the results of the symposium, which had been held from 27 September to 1 October 1976 at Bucharest at the invitation of the Romanian Government (report of the Symposium: TIM/SEM.5/2). The Committee warmly thanked the Government of Romania for the excellent organization of the symposium and of the study visit on 27 September to the wood-working complex at Pitesti, and for the generous hospitality extended to participants.

31. The Committee agreed with the Symposium's conclusion that it was of great importance to develop techniques and methods of using in a rational and economic way the sizeable resource available in residues from the harvesting, primary and secondary processing of wood and from wood after its original use; welcomed the exchange of views on the subject which had been possible at the Symposium; and endorsed the symposium's conclusions and recommendations. The Committee agreed to consider under item 9 of the Agenda those recommendations of the symposium which affected its own programme of work. In view of the interest of the papers presented to the symposium, the Committee decided that they should be issued as a supplement to the Timber Bulletin for Europe. The Committee also agreed with the symposium's conclusion that the problem of wood residue utilization was not only of interest to those countries which were already making intensive use of this resource, but to all countries, including those that produced tropical hardwood. It therefore requested all governments, not only those of ECE countries, to make the results of the symposium as widely known as possible.
32. The Secretariat note TIM/R.25 summarized the position reached in the final preparation of the study for publication. This revision had taken account of the discussion of the draft at the thirty-third session of the Timber Committee in October 1975, held jointly with the FAO European Forestry Commission, and of comments and corrections received from countries subsequent to that meeting. As the revision and completion of the study was almost completed, the Secretariat expected that it would be published by the end of 1976.

33. A preliminary version of the summary and main conclusions from the study was presented by the Secretariat. The Committee expressed great interest in this presentation and welcomed the fact that the study would be published soon. It considered that the study would provide an urgently needed basis for regional studies of the development of the sector and a complement to national studies.

34. It was recommended that provision be made in the programme of the thirty-fifth session of the Committee in 1977, for discussion on the detailed implications of the study and on the arrangements that should be made by the Committee to follow up the study and to update its findings.

(f) Transport and handling of forest products

35. The Committee was informed by its co-ordinator in this field that there had been few notable developments recently except for the use of 40-foot containers, primarily for the transport of hardwoods.

Market review and prospects (Item 6 of the Agenda)

36. The Committee heard a brief statement from each delegation on recent developments in the market for sawn softwood, hardwoods, wood-based panels, pulpwood and coniferous logs, which supplemented countries' written market statements. It took note during its discussion of the Annual Forest Products Market Review, prepared and issued by the Secretariat, and of the brief comments on recent developments in the market submitted by the Secretariat in TIM/CRP.19. It drew up tables of countries' estimates for 1976 and 1977 of domestic requirements, production, imports and exports of the products under consideration. A summary table is presented in annex I.

37. The Committee took note of the suggestion of its office-holders to amalgamate the end-year market review (usually issued in May/June) and the Annual Forest Products Market Review (usually issued in August/September) in view of the degree of duplication between the two publications (TIM/R.28, para. 7). While supporting the intention of this change, the Committee noted that a combination of delays in receiving from some countries the data needed for the Review and of delays in processing it after its preparation by the Timber Division had, for the latest issue, reduced its topicality and usefulness. The Committee invited its office-holders to look again at the problem of speeding up the publication of the market reviews and to submit proposals to its next session.

38. After the deep recession of 1974/75, the markets for most forest products began to recover towards the end of 1975, to the extent that consumption, production and trade were in many cases above the low levels forecast by the October 1975 session of the Committee. Compared with the depressed volumes of January-June 1975, European trade of forest products rose appreciably in the first half of 1976 with the main exceptions of pulpwood, newsprint and imports of paper woodpulp. Production of sawn softwood and of wood-based panels also staged partial recoveries.
39. The upturn in the forest products sector reflected the trend in the economies of western Europe, which by the end of the second quarter of 1976 had recovered to a point which was still below the pre-recession level. The main support for this economic recovery came from restocking and consumption in the private sector. During the third quarter of the year, however, both had lost some of their vigour and the summer pause in economic growth turned out to be more marked than generally predicted. This has been attributed to the sluggishness in enterprise investment which in turn is due to a variety of factors, including low capacity utilization and low profits. The climate of cautious expectation which still prevails as to the short-term prospects for the European economy is due partly to the high levels of unemployment in most of western Europe, a rate of inflation which is cause for concern in several countries, even if less acute than a year ago, the generally high interest rates, and continued turbulence in the international monetary field.

40. While some of the negative features mentioned above, notably high unemployment, applied also to the North American economy, the upturn there since mid-1975 had been brisk, bringing output in mid-1976 above the pre-recession level. A pause in economic expansion was also apparent in North America, but most analysts were agreed that the pace would quicken again in late 1976 or early 1977.

41. Construction activity has remained subdued in most western European countries and, in total terms, no early upturn is expected. The Committee's attention was drawn, however, to a number of developments in the dwelling construction sector, which could mitigate the impact on the forest products sector, including the following: continued high levels of dwelling construction in eastern Europe; the increasing proportion in the total of new constructions of low-rise dwellings, with their relatively high forest products content; growing demand for secondary homes which also use substantial quantities of forest products; and an increasing proportion of timber-frame buildings in a number of countries. Reference was also made to the potential for a number of forest products arising from the increased concern for better insulation of buildings.

42. With regard to the prospects for the coming year, the Committee noted firstly that there were differences in the current state of the economies of European countries and that this coloured their outlook on the next stage of the recovery. On the whole, it seemed reasonable to expect further economic expansion in Europe in 1977, although the rate of growth was likely to range from slow to moderate. This is mirrored by the Committee's estimates of domestic requirements of sawnwood, wood-based panels and pulpwood, the aggregated European totals of which show increases in 1976 over 1975 for all the assortments covered, followed by a further rise, in most cases small, in 1977. Domestic requirements of particle board in Europe will recover to a new record level this year and a further rise of 4% to 21.3 million m³ is forecast for 1977. Total requirements of pulpwood are forecast to expand by 5% in 1976 and by a further 9% in 1977 to a level just above the previous peak in 1974, although the Committee noted that the forecast for next year might prove to be optimistic, given the large stocks of wood pulp in the main producing countries and of pulpwood and chips in a number of them. For the other products domestic requirements in 1977, while above those of 1975 and 1976, will remain well below the record volumes of 1973.
Many delegations referred to the low or even negative rates of return on capital in the wood-processing industries in their countries at the present time. A number of factors were contributing to this situation: low rates of capacity utilization; continuously rising costs of raw materials, labour and other production inputs; high interest rates; and inflation; whilst selling prices, although higher than in 1975, were nevertheless below the 1973/74 levels. This raised serious doubts as to the ability of these industries to generate sufficient capital or attract investment with which to finance the long-term expansion and modernization which the study "European Timber Trends and Prospects, 1950 to 2000" showed would be needed.

Another question raised was the fluctuations and levels of stocks of forest products along the chain of supply from producer to consumer. The past two years had witnessed a de-stocking movement of sawlogs, sawnwood and wood-based panels which had brought holdings in autumn 1976 to low levels in several countries. It was recognized that it was costly to carry large stocks, that recent developments in transport had reduced the time needed for delivery and that the increase in kilning capacity had, in the case of sawnwood, drastically reduced the storage time at sawmills. On the other hand there were supplementary costs involved in trading on a hand-to-mouth basis. The Committee agreed that the question of stock-holding was of considerable interest and might be taken up in more depth at a subsequent session, for instance as a topic for a special lecture.

Special lecture (Item 7 of the Agenda)

In accordance with the proposals of the Committee's office-holders, the special lecture was devoted to the subject of the causes of cyclical fluctuations in the markets for forest products and ways to reduce them. A panel of three speakers presented lectures: Mr. L. Michaelis of the Weyerhaeuser Corporation (United States of America) spoke on "Are the cycles of the forest products market in the USA inevitable?". Mr. S. Uhlin, of the University of Umeå (Sweden) took as the title of his contribution "Cyclical fluctuations in the market for sawn softwood". Mr. L.W. Woodburn-Bamborgei of the Timber Trade Federation (United Kingdom) took as his theme "The reasons for substantial fluctuations in imports".

These presentations were followed by a wide-ranging discussion, which touched notably on the following points:

- the effect of macro-economic cycles, especially in the construction sector, on the market for forest products
- the role of government policy in influencing cyclical trends, notably in interest rates and the availability of funds for housing
- the destabilizing effect of time lags between a change in trend, a decision based on perception of this change and the coming into effect of the decision
- the need for international co-operation and exchange of information as one means of evening out the fluctuations. The desirability of better data on stocks "in the pipeline" was noted, although it was recognized that there were many obstacles to obtaining accurate data on this
- the possibility of a future market in sawn softwood in Europe was also evoked
- the role of psychological factors.
47. The Committee expressed its warm appreciation of the excellent presentations of the three speakers and requested that their papers, which constituted an important contribution to the work of the Committee on the nature of markets for forest products should be published as a supplement to the Timber Bulletin for Europe.

Activities of other Principal Subsidiary Bodies of ECE dealing with problems of concern to the Committee (Item 8 of the Agenda)

48. In accordance with Commission resolution 1 (XXX) and on the basis of document TIM/R.27, the Timber Committee was informed of the activities of other Principal Subsidiary Bodies of ECE dealing with problems of concern to it. The Committee took note of the document and agreed to take the information presented into account when discussing its programme of work.

Programme of work for 1977-1981 (Item 9 of the Agenda)

49. The Committee considered its long-term programme on the basis of Secretariat note TIM/R.28, which takes into account the programme approved by the Committee at its thirty-third session, the suggestions put forward by the Executive Secretary at the thirty-first session of the Commission in document E/ECE/900, and the comments on the Executive Secretary's suggestions made at the Commission's thirty-first session.

50. The Committee agreed that any action which it might take to study trends in the utilisation of forest products in specific end-use sectors (14.1.2) had to be preceded by an improvement of end-use statistics (14.5.2.7).

51. The Committee examined the draft of the survey on the capacity and structure of the wood-based panels sector, 1977 (TIM/R.28/Add.1) (14.1.3.1). It noted that the survey was to be carried out, as on previous occasions, in collaboration with the FAO Committee on Wood-Based Panel Products. In response to the note by the Executive Secretary concerning the collection of information through questionnaires and enquiries (GE.74-27826), the Committee agreed that the purpose of the survey was to enable Governments to form their own industrial policies for the wood-based panels sector in the light of information on international conditions. The Committee approved the enquiry as set out in TIM/R.28/Add.1, with minor modifications.

52. The Committee took note of the fact that a draft enquiry was being prepared on the structure and capacity of the sawmilling industry (14.1.3.2). The Committee also took note that this draft would be presented for comment to the Joint FAO/ECE Working Party on Forest Economics and Statistics, and following that, for approval to the thirty-fifth session of the Committee, after which it would be distributed to member governments. Decision on future studies of this nature would depend on the results of this first survey.

53. Since resources were not made available to the Secretariat for the project, the study on the production and utilization of improved wood-based panels, with special reference to their surface covering (14.1.4) was deferred to 1980, the date of the next medium-term survey on the wood-based panels sector.

54. The Committee noted the importance attached to solving the problems related to rationalising the transport and handling of forest products (14.2.2) and decided to keep this item in its programme of work.

In this and subsequent paragraphs, the references to projects in brackets refer to the programme of work as set out in annex II.
55. Discussing its activities in the field of standardization (14.2.3), the Committee recalled the decisions reached under item 5 (c) of its agenda (paras. 25-29) and requested that they be integrated into its programme of work. The ad hoc meeting scheduled for 1977 would therefore prepare ECE recommended standards on stress grading (14.2.3.4) and finger-jointing of structural coniferous sawn timber (14.2.3.5) for submission to the Committee's thirty-fifth session. The Committee also decided that the ad hoc meeting should prepare proposals for future action by the Committee to reduce the number of standard dimensions of sawn softwood entering international trade (14.2.3.6).

56. The delegate of the USSR referred to the discussions and terminology difficulties that had arisen during the Symposium on multi-purpose logging machines in Sweden in 1975. He informed the Committee of a Russian glossary of forestry and wood-working terms which was being prepared in his country and offered to put this glossary at the disposal of the Committee at its next session. The delegate of Canada stressed the interest of a multi-lingual glossary of forest-based industry terms. The Timber Committee recognized the need for harmonization and standardization of some currently used terms, especially in the field of forest working techniques, so as to facilitate understanding on an international level and avoid misinterpretation. It thanked the delegate of the USSR and requested him to present to the Committee's office-holders, when they next met, an outline of the work being carried out in his country on the basis of which the office-holders could formulate a proposal concerning the scope of the work which might be undertaken and the methods of work to be used. This proposal should be presented to the Committee at its thirty-fifth session.

57. The Committee also endorsed the recommendation of the symposium on extending the use of wood residues "that the Timber Committee consider the means of harmonizing national classification and definitions of wood residues in order to facilitate international comparisons and analyses of the wood supply situation at the regional level" (TIM/SEM.5/2, para. 32) and requested the Joint FAO/ECE Working Party on Forest Economics and Statistics to consider at its eleventh session how this work would best be carried out (14.2.3.3).

58. The Committee noted that section 14.3.1 of its programme of work reflected the structure and methods of work of the Joint FAO/ECE/ILO Committee on Forest Working Techniques and Training of Forest Workers before the start of the process of restructuring which the Committee had discussed and approved under item 5 (a) of its agenda (paras. 19-22). The Committee agreed that the part of its own programme which dealt with the Joint Committee's work should not be modified until this process had been completed.

59. The Committee was informed of the preliminary preparations, and of the programme and objectives of the seminar on the behaviour of wood products in fire (14.3.2) which had been drawn up at an informal preparatory meeting (TIM/R.28/Add.2). It welcomed the confirmation of the provisional invitation made at its previous session by the United Kingdom to host the seminar at Oxford from 22 to 25 March 1977. The Committee endorsed the provisional agenda and objectives of the seminar, which it considered would have an important impact on the rationalization of wood utilization in construction and on reducing obstacles to international trade in forest products.
60. It approved the approach by the Secretariat to the authorities in countries inviting them to nominate experts to prepare basic papers and to act as discussion leaders. The Committee requested the Secretariat to finalize these arrangements as soon as possible and invited countries to submit supplementary papers to the Seminar on specific items in the provisional agenda. It noted that, in view of the fact that participation had to be restricted to 60 persons, due to the limited conference facilities, countries from which a large number of applications were received might have to select a reduced number of representatives. The Committee welcomed the fact that the Seminar was being prepared in close collaboration with the Secretariat of the ECE Committee on Housing, Building and Planning.

61. The Committee agreed that the problem of the utilization of tropical hardwoods (14.3.3) deserved careful study, not least because of the contribution which the Committee could make in assisting the developing countries in the expansion of their forest industries and exports. It supported the preparation in 1977 of a study on the trade and utilization of tropical hardwoods as a follow-up to the Study on European Timber Trends and Prospects, 1950 to 2000, and as part of the preparations for the 1979 seminar on the utilization of tropical hardwoods. It supported the suggestion that the programme of the seminar be designed to be of interest to the developing countries, which should be invited to send representatives.

62. The Committee was informed of work being undertaken by the European Economic Community with respect to the effects of taxation on forest management and wood supply (14.3.4) and requested the Secretariat to communicate with the authorities of the EEC with a view to bringing this work to the attention of the Joint FAO/ECE Working Party on Forest Economics and Statistics. On the basis of this and of other information in this field which countries were invited to make available, the Working Party should draft a proposal for its activities on this project.

63. There was strong support for the symposium on economic and technical developments in the furniture industry (14.3.5) to be held in Poland in 1979. The Committee agreed to convene a preparatory meeting and requested the Secretariat to explore the possibility with interested countries, including Poland, of appointing one or more government rapporteurs who would act as technical advisers to assist in preparing the ground for the preparatory meeting and the symposium.

64. With regard to the symposium on modernization in the wood-based panels industries, (14.3.6) in 1980, the Committee approved the suggestion that the collaboration be sought of the Chemical Industries Committee, in view of its competence in the field of adhesives and other chemicals used in panels manufacture.

65. The Committee agreed that it would be useful to keep under review the 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 (14.3.8), especially in the light of the findings of the Study on European Timber Trends and Prospects, 1950 to 2000. Given, however, the vast scope of this topic and the limited availability to the Timber Committee Secretariat of resources and expertise, it agreed that the initial work should be strictly limited to a reconnaissance of the problem by the Secretariat, which should determine what other studies had been undertaken at the international level.
66. On the basis of the findings of this reconnaissance, and after having consulted with other Principal Subsidiary Bodies of ECE, the Committee could decide at its thirty-sixth session on a course of action. The assistance should be sought of the International Union of Forestry Research Organizations (IUFRO) and other competent bodies.

67. The Committee agreed that there was need for a preparatory meeting for the symposium on the effects of pollution on vegetation (14.4.3), to be held in Poland in 1978. It requested the Secretariat to draw this matter to the attention of the Committee on Agricultural Problems, the co-sponsor of the project, as well as the Senior Advisers to ECE Governments on Environmental Problems and the United Nations Environmental Programme (UNEP), so that such a meeting could be arranged.

68. With regard to the Symposium on efficiency in energy use in forestry and the wood-processing industries (14.4.4) scheduled for 1978, the Committee agreed to the holding of a preparatory meeting in 1977.

69. The Committee requested the Secretariat to draw the attention of the eleventh session of the Joint FAO/ECE Working Party on Forest Economics and Statistics to the implications of the study "Timber Trends and Prospects in Europe, 1950 to 2000" for its programme of work, including the areas requiring further examination listed in document TIM/R.26. The Working Party should recommend changes to the programme of work in the light of the findings of the study.

70. The Committee requested that the Working Party, when considering the organization and periodicity of statistical data collection and dissemination (14.5.2.2), re-examine the problems associated with the timeliness and completeness of member country replies to the questionnaires for the Timber Bulletin for Europe, and propose measures to improve the current situation.

71. The Committee's attention was drawn to the questionnaires on conversion factors (14.5.2.3) and on cost and price statistics (14.5.2.5) for which the deadline for replies was 30 September 1976. The Committee requested that countries which had not replied should do so as completely and as soon as possible, so that the results could be processed in time for the eleventh session of the Working Party.

72. The Committee was informed of the proposed programme for the 1977 study tour (14.5.3) which was scheduled to take place from 18 to 26 September in Italy, at the invitation of the Italian Government. The study tour would concentrate on the situation of forestry and the forest industries in the Mezzogiorno. The Committee approved the programme and thanked the Government of Italy for its kind invitation.

73. The delegate of Czechoslovakia expressed his satisfaction with the balance achieved in the programme of work between its economic and technical parts. He considered that several aspects of the Committee's activities would be of interest to the proposed all-European congresses on co-operation in the field of protection of the environment, development of transport and energy.

74. On the basis of these discussions, the Committee approved its programme of work as set out in annex II.
Other business (Item 10 of the Agenda)

75. The Committee agreed that any market statement presented to its annual sessions should be treated as confidential if the country which had prepared it so requested. The delegations of Canada and the United Kingdom indicated that their statements should be considered confidential.

Adoption of the report of the Committee's session (Item 11 of the Agenda)

76. The draft report, presented by the Secretariat, was adopted, with some modifications which have been incorporated in the present document.

Date of next session

77. The Committee agreed that its next session should be held from 17 to 21 October 1977, subject to the availability of conference services for that period.

Films

78. The delegation of Finland showed a film entitled "Rhapsody in Wood". The delegation of the USSR showed two films: "Man and the Forest" and "Novelties in Technology of the Wood-working Industry". The Committee thanked these delegations for the most interesting films.
**Annex I**

**Europe (excl. USSR): Summary table of market forecasts for 1976 and 1977 (million m3)**

<table>
<thead>
<tr>
<th></th>
<th>Domestic requirements</th>
<th>Production</th>
<th>Imports</th>
<th>Exports</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sawn softwood</td>
<td>66.85</td>
<td>69.24</td>
<td>69.86</td>
<td>59.59</td>
</tr>
<tr>
<td>Sawn hardwood</td>
<td>18.29</td>
<td>19.68</td>
<td>19.97</td>
<td>16.72</td>
</tr>
<tr>
<td>- Temperate-zone</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Tropical</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hardwood logs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Temperate-zone</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Tropical</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Particle board</td>
<td>19.10</td>
<td>20.49</td>
<td>21.29</td>
<td>19.13</td>
</tr>
<tr>
<td>Plywood</td>
<td>4.73</td>
<td>5.30</td>
<td>5.38</td>
<td>3.57</td>
</tr>
<tr>
<td>Fibreboard</td>
<td>4.10</td>
<td>4.34</td>
<td>4.48</td>
<td>3.87</td>
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<tr>
<td>Pulpwood</td>
<td>138.64</td>
<td>145.37</td>
<td>158.77</td>
<td>128.26</td>
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<tr>
<td>- Roundwood, coniferous</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>- Roundwood, broadleaved</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Residues, chips and particles</td>
<td></td>
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<tr>
<td>Coniferous logs</td>
<td></td>
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</table>

¹ Including USSR exports

* Estimated by Secretariat on basis of incomplete information.
Annex II

TIMBER COMMITTEE PROGRAMME OF WORK FOR 1977-1981

Work area 14.1

MEDIUM AND LONG-TERM TRENDS AND PERSPECTIVES


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.

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.

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

14.1.3.1 The wood-based panels industries

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

Method of work: The 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.

14.1.3.2 The sawmilling industry

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

Method of work: The Secretariat will prepare a study, based on questionnaire returns, in conjunction with the medium-term survey of markets for sawmwood and sawlogs scheduled for 1978. The Committee will determine whether such studies should in future be undertaken on a regular basis.

14.1.4 Medium-term trends in the markets for specific forest products

Description: The Committee will review medium-term (3-5 year) 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.

Method of work: 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.

14.1.5 Relative long-term price trends of forest products and alternative materials

continues...
**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/UN/FAO Working Party on Forest Economics and Statistics, which will decide at its eleventh session, scheduled for 1977, what further work should be undertaken.

**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 connection 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 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.
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.

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.

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.

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).

14.2.3.3 Classification and definitions of wood resiudues

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.

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/MP.3/AC.3/G/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.

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.

Method of work: An ad hoc 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.

14.2.3.6 Reduction of the number of standard dimensions of sawnwood entering international trade

Description: The Committee will formulate proposals for the reduction of the number of standard dimensions of sawnwood entering international trade, on the basis of ISO International Standard 3179 and in collaboration with ISO, with a view to facilitating international trade in sawnwood.

Method of work: The ad hoc meeting in 1977 will give preliminary consideration to the problem and prepare proposals for methods of work for the Committee's thirty-fifth session.
14.2.4 Rationalization of the flow of forest products from the forest to the consumer

Description: 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.

Method of work: 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.

Work area 14.3

SELECTED ECONOMIC, TECHNOLOGICAL AND MANAGERIAL PROBLEMS

14.3.1 Forest working techniques and training of forest workers

This project is covered by the activities of the Joint FAO/ECB/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 (see paras. 19-22 and 58).

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 minimising 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.

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.
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.

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.

Method of work: 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.

14.3.2 Behaviour of wood products in fire

Description: 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.

Method of work: A seminar will be held in March 1977, in Oxford (United Kingdom).

14.3.3 Utilization of tropical hardwoods

Description: The Committee will review the utilization of tropical hardwoods with a view to analysing patterns and trends in the demand for these products and to identifying opportunities for expanding trade with developing countries.
Method of work: 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).

14.3.4 Effects of taxation on forest management and wood supply

Description: The Committee will review the effects of national taxation systems on forest management and wood supply with a view to assessing how these systems affect the supply/demand balance for forest products in the ECE region and the structure of international trade.


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.

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 Industries Committee (offers to act as host country are invited).

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.
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 Industries Committee, the Committee will keep under review, from the technical and economic point of view, progress made in the chemical processing of wood (other than for pulp and paper) with a view to improving the utilization of by-products of the wood processing industries, and to assessing potential demand from the chemical industry for wood raw material, as well as the effect any increase would have on the supply/demand balance for forest products in the ECE region and the availability of raw material for traditional wood-using industries.

Method of work: 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.

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.

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.
Method of work: A symposium will be held in 1981. (Offers to act as host country are invited).

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 resource 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.

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).

Work area 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.

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.

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.

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.

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 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.

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.

14.5.2.6 Labour statistics

Description: The Working Party, in co-operation with the Joint FAO/CE/IL0 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.

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).


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 organising 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).
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<td>Wood-based panels industries</td>
<td>Sawmilling industry</td>
<td>Wood-based panels industries</td>
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<tr>
<td>14.1.4</td>
<td>Medium-term trends in the markets for specific forest products</td>
<td>Wood-based panels</td>
<td>Sawmood and sawlogs</td>
<td>Wood-based panels (including study of production and utilization of improved wood-based panels)</td>
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<tr>
<td>14.1.5</td>
<td>Relative long-term price trends of forest products and alternative materials</td>
<td>Pilot study</td>
<td>Continuous (Method of work to be determined by Joint FAO/ECE Working Party on Forest Economics and Statistics)</td>
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**Work area 14.2: CURRENT MARKET DEVELOPMENTS AND SHORT-TERM PROSPECTS, INCLUDING PROBLEMS RELATING TO INTERNATIONAL TRADE**

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<tr>
<td>14.2.1</td>
<td>Review of production, trade, consumption and prices of forest products</td>
<td>Continuous</td>
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<tr>
<td>14.2.2</td>
<td>Selected problems in rationalizing the transport and handling of forest products</td>
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<td>14.2.3</td>
<td>Selected problems of standardization in the field of forest products, including classification and definitions</td>
<td>Continuous</td>
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<td>14.2.3.1</td>
<td>Review of standardization activities</td>
<td>Continuous</td>
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<td>14.2.3.2</td>
<td>Revision of FAO Classification and Definitions of Forest Products</td>
<td>Continuous</td>
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<tr>
<td>14.2.3.3</td>
<td>Classification and definitions of wood residues</td>
<td>As determined by the Joint FAO/ECE Working Party on Forest Economics and Statistics at its eleventh session</td>
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<tr>
<td>14.2.3.4</td>
<td>Standardization of stress grading of structural coniferous sawn timber</td>
<td>Ad hoc meeting</td>
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<tr>
<td>14.2.3.5</td>
<td>Standardization of structural finger-jointing in coniferous sawn timber</td>
<td>Ad hoc meeting</td>
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<td>14.2.3.6</td>
<td>Reduction of the number of standard dimensions of sawnwood entering international trade</td>
<td>Ad hoc meeting</td>
<td>As decided by Committee on basis of recommendations of Ad hoc meeting</td>
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<tr>
<td>14.2.4</td>
<td>Rationalization of the flow of forest products from the forest to the consumer</td>
<td>Special lecture (Method of work to be defined by the thirty sixth session)</td>
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**Work area 14.3: SELECTED ECONOMIC, TECHNOLOGICAL AND MANAGERIAL PROBLEMS**

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<tr>
<td>14.3.1</td>
<td>Forest working techniques and the training of forest workers (Activities of the Joint FAO/ECE/ILC Committee)</td>
<td>Twelfth session of the Joint Committee held in Bulgaria</td>
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<tr>
<td>14.3.1.1</td>
<td>Methods and organization of forest work</td>
<td>Ninth session of Study Group</td>
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*Offers to act as host country are invited.*
### Annex III

#### Tabular presentation of Timber Committee draft programme of work 1977-1981

<table>
<thead>
<tr>
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<tr>
<td>14.3.1.2</td>
<td>- Vocational training and prevention of accidents in forest work</td>
<td>Eleventh session of Study Group</td>
<td>Symposium on the prevention of accidents in forest work, held ..........................</td>
<td>Twelfth session of Study Group</td>
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<td>14.3.1.3</td>
<td>- Mechanisation of forest work</td>
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<td>14.3.1.4</td>
<td>- Dissemination and exchange of information</td>
<td>Continuous, as determined by eleventh session of Joint Committee</td>
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<td>14.3.2</td>
<td>Behaviour of wood products in fire</td>
<td>Seminar in the United Kingdom</td>
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<td>14.3.3</td>
<td>Utilisation of tropical hardwoods</td>
<td>Preparation of study</td>
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<td>14.3.4</td>
<td>Effects of taxation on forest management and wood supply</td>
<td>Method of work to be determined by the Joint FAO/ECE Working Party on Forest Economics and Statistics, at its eleventh session</td>
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<td>14.3.5</td>
<td>Economic and technical developments in the furniture industry</td>
<td>Preparatory meeting</td>
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<td>Symposium in Poland</td>
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<td>14.3.6</td>
<td>Modernisation in the wood-based panels industries</td>
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<td>14.3.7</td>
<td>Investment and investment needs in the forestry and wood-processing sectors</td>
<td>Special lecture (Method of work to be defined by the Thirty-fifth session)</td>
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<td>14.3.8</td>
<td>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</td>
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#### Work area 14.4: ENVIRONMENTAL AND RESOURCE CONSERVATION PROBLEM

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<tr>
<td>14.4.1</td>
<td>Quantification and evaluation of the environmental benefits of forests</td>
<td>Method of work to be determined by the Joint FAO/ECE Working Party on Forest Economics and Statistics, at its eleventh session</td>
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<td>14.4.2</td>
<td>Reduction of waste and development of use of residues in forestry, the wood-processing industries and in forest products utilisation</td>
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<td>14.4.3</td>
<td>Effects of pollution on vegetation</td>
<td>Preparatory meeting</td>
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<td>Symposium in Poland</td>
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<td>14.4.4</td>
<td>Efficiency in energy use in forestry and the wood-processing industries</td>
<td>Preparatory meeting</td>
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<td>Symposium in ................1/</td>
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#### Work area 14.5: COLLECTION, EXCHANGE AND DISTRIBUTION OF INFORMATION, INCLUDING IMPROVEMENT AND HARMONIZATION OF STATISTICS

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<tr>
<td>14.5.1</td>
<td>Timber Bulletin for Europe</td>
<td>Continuous (twice yearly publication)</td>
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<td>14.5.2</td>
<td>Selected problems of economics and statistics of forestry and forest products</td>
<td>Eleventh session of Joint Working Party</td>
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<td>Twelfth session of Joint Working Party</td>
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<td>14.5.2.1</td>
<td>- Comparability of statistics</td>
<td>Continuous. Method of work to be determined by Working Party</td>
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<td>14.5.2.2</td>
<td>- Organization and periodicity of statistical data collection and dissemination</td>
<td>Continuous. Review at regular sessions of Joint Working Party</td>
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<td>14.5.2.3</td>
<td>- Conversion factors</td>
<td>Review at eleventh session</td>
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<td>14.5.2.4</td>
<td>- Forest resource analysis</td>
<td>Method of work to be determined by Joint Working Party</td>
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<td>14.5.2.5</td>
<td>- Cost and price statistics</td>
<td>Recommendation of series</td>
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<td>14.5.2.6</td>
<td>- Labour statistics</td>
<td>Review of pilot questionnaires at eleventh session</td>
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<td>14.5.2.7</td>
<td>- End-use statistics</td>
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<tr>
<td>14.5.3</td>
<td>Dissemination and exchange of general information and experience</td>
<td>Study tour in Italy</td>
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<td>Study tour in Poland</td>
<td>Study tour in ................1/</td>
<td>Study tour in ................1/</td>
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\[1/\] Offers to act as host country are invited.