REPORT OF THE FORTY-SECOND SESSION
held at Geneva from 8 to 12 October 1984
As approved by the Committee

Table of contents

Introduction 1
Adoption of the Agenda 6
Election of officers 7
Matters arising out of the thirty-ninth session of the Commission 8
Activities of other international bodies relevant to the work of the Committee 9

Review of activities since the Committee's forty-first session

(a) Joint FAO/ECE/ILO Committee on Forest Working Techniques and Training of Forest Workers 20
(b) Joint FAO/ECE Working Party on Forest Economics and Statistics: preparations for fifteenth session 26
(c) Meeting of the team of specialists on stress grading and finger-jointing of coniferous sawn timber 30
(d) Meeting of the team of specialists on energy derived from wood 35
(e) Structure of the sawmilling industry
   (i) Seminar on methodologies of data collection for the sawmilling industry 40
   (ii) Enquiry on the structure of the sawmilling industry: preliminary results 43

GE.84-42888
Market developments in 1984 and prospects for 1985:

(a) General introduction
(b) Sawn softwood and coniferous logs
(c) Hardwoods (temperate-zone and tropical)
(d) Wood-based panels
(e) Pulpwood
(f) Points arising from the discussion of market developments

Forest damage

(a) Special topic: assessment of damage to forests and loss of wood raw material from different causes
(b) Implications of air pollution damage to forests for wood supply and forest products markets: results of enquiry
(c) Measures to be taken in the event of sudden and severe damage to forests

Study of European timber trends and prospects: progress report

Activities of other Principal Subsidiary Bodies of ECE of concern to the Timber Committee

Programme of work for 1985-1989

(a) Proposals submitted to the thirty-ninth session of the Commission
(b) Review and revision of the draft programme of work for 1985-1989

Other business

Adoption of the report of the Committee's session

Date of next session

Annex I - Europe (excluding USSR): summary table of market forecasts for 1984 and 1985

Annex II - Timber Committee programme of work for 1985-1989: overview at 3-digit level

Annex III - Timber Committee programme of work for 1985-1989: detailed presentation at 4-digit level

Annex IV - Tabular presentation of Timber Committee programme of work for 1985-1989
Introduction

1. The Timber Committee held its forty-second session at Geneva from 8 to 12 October 1984. The session was attended by representatives from the following ECE countries: Austria; Belgium; Bulgaria; Byelorussian Soviet Socialist Republic; Canada; Czechoslovakia; Finland; France; German Democratic Republic; Germany, Federal Republic of; Greece; Hungary; Ireland; Italy; Luxembourg; the Netherlands; Norway; Poland; Portugal; Romania; Spain; Sweden; Switzerland; Turkey; Union of Soviet Socialist Republics; United Kingdom of Great Britain and Northern Ireland; United States of America; and Yugoslavia. 1/

2. The following United Nations and Specialized Agencies were represented: United Nations Conference on Trade and Development (UNCTAD); International Labour Organization (ILO); Food and Agriculture Organization (FAO).

3. The following intergovernmental organizations participated: General Agreement of Tariffs and Trade (GATT); European Economic Community (EEC).

4. The following non-governmental organizations were represented: European Confederation of Agriculture (CEA); the European Federation of Plywood Industries (FEIC); the International Federation of Building and Wood Workers (IFBWW); International Organization for Standardization (ISO); The International Technical Association for Tropical Timber (ATIBT); the Organization of European Sawmilling Industries (OES).

5. The Committee paid homage to the memory of Mr. Knut Ronge, delegate of Sweden and past Chairman of the Timber Committee, Mr. Vladimir Novak, delegate of Czechoslovakia and Mr. Albe Urbanovski, delegate of Yugoslavia.

Adoption of the Agenda (Item 1 of the Agenda)

6. The provisional agenda (ECE/TIM/24), presented by the secretariat, was adopted.

Election of Officers (Item 2 of the Agenda)

7. The Committee elected Mr. E. Nowicki (Poland) Chairman and Mr. L. Strângh (Sweden), Vice-Chairman. It expressed its deep appreciation to Mr. A. Fronticillo (Italy), the outgoing Chairman, for his valuable services to the Committee.

Matters Arising out of the Thirty-ninth Session of the Commission (Item 3 of the Agenda)

8. The Committee was informed of the Commission's discussion of its work. Attention was drawn to the resolution and decisions of the Commission, on the basis of TIM/R.93. The Committee agreed to take account of these discussions, resolution and decisions, particularly with regard to its programme of work.

Activities of other international bodies relevant to the work of the Committee (Item 4 of the Agenda)

9. The Committee was informed about the meeting of the FAO Committee on Forestry in Rome in May 1984 which had considered in particular potential problems and prospects for forestry beyond 2000.

1/ Further information about participation may be obtained from the secretariat, Timber Section, ECE/FAO Agriculture and Timber Division, Palais des Nations, CH-1211 Geneva 10.
10. In connection with the forthcoming Ninth World Forestry Congress to be held in Mexico in July 1985, the Committee on Forestry had supported a proposal by Austria that 1985 be proclaimed the International Year of the Forest. This would be considered finally by the FAO Council at its meeting in November 1984.

11. Attention was also drawn to the meeting of the FAO Advisory Committee on Wood-Based Panel Products to be held in Rome in December 1984. The FAO Advisory Committee of Experts on Pulp and Paper would consider a draft report on the outlook for pulp and paper at its meeting in June 1985.

12. The Committee was also informed of the results of the FAO Regional Conference for Europe held in Reykjavik (Iceland) in September 1984, notably as regards the protection of the forest resources in Europe from various threats including air pollution, fire, insects and diseases. The Conference had adopted a Resolution on Conservation and Protection of Forest Resources.

13. The Committee was also informed of the activities of its sister body, the FAO European Forestry Commission, in particular as regards forest damage, notably from air pollution (see para. 99). The Committee noted that the EFC would co-sponsor the review meeting for the timber trends study (see para. 114) and welcomed the suggestion that a joint session of the two bodies be held, perhaps in 1987, to discuss the policy implications of the long-term study.

14. The Committee was informed of the preparations for the first session of the ILO Forestry and Wood Industries Committee which will be held from 18 to 26 September 1985. Preparatory work consisted of the issue of a general report and of two technical reports. The latter would cover the achievement of full employment in the woodworking industries and working, living and social conditions in the forestry sector.

15. The representative of UNCTAD informed the Committee of the conclusion of the International Tropical Timber Agreement, in November 1983, under the Integrated Programme for Commodities. It was hoped that the Agreement would come into force before the end of March 1985, once the necessary requirements for signature and ratification had been fulfilled. The bodies of the International Tropical Timber Organization will be its Council and three permanent Committees on Economic Information and Market Intelligence, on Reforestation and Forest Management, and on Forest Industry.

16. The representative of the GATT secretariat recalled that the annual session held at the Ministerial level in 1982 had decided to include in GATT's programme of work the identification of trade problems, falling within its competence, of semi-processed and processed forest products. The Committee was informed of the establishment by the GATT Council in Spring 1984 of a Working Party on trade in certain natural resource products, including forestry products; two meetings relating to forestry products had been held and it was expected that a number of specific problems would be identified in the interim report to the GATT Council next November, which the Chairman of the Working Party would present on his own responsibility.

17. The representative of the ISO drew the attention of the Committee to ISO bibliography No. 1, International standards for wood products and woodworking machinery, which lists over 200 published standards, draft standards and proposals. He reported on the merger between the three ISO/TCs concerned with wood-based panels (TCs 89, 139 and 151) and on the good progress now being made in the work.
of ISO/TC 165, Timber Structures. Very close co-operation between ECE Principal Subsidiary Bodies and ISO had been a natural development of recent preoccupations with the dismantling of non-tariff barriers to trade and also reflected recognition of Governments as partners with industries as the major clients for international standards.

18. The Committee was informed of the thirty-sixth General Assembly of CEB held in September 1984 at Avignon. The assembly had adopted a resolution on present silvicultural problems in Europe which expressed concern in particular about rising silvicultural costs and stressed the importance of finding outlets for small-sized wood.

19. The Committee was also informed of the activities of the IFBWW, notably the recent meeting of its Wood and Forestry Committee, which discussed employment problems in the forest sector as well as the implications for the woodworking industries of air pollution damage to forests. The Committee was also informed of the conference held last May on health and safety for wood, forestry and building workers. The IFBWW representative identified a number of areas where his Organization was ready to work with the Committee.

Review of activities since the Committee's forty-first session (Item 5 of the Agenda)

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

20. The Committee was informed by Mr. A.P. Livanov (USSR), Chairman of the Joint Committee of the results of the fifteenth session, held in Izmir-Cesme from 22 to 25 May 1984 at the invitation of the Government of Turkey. It approved the Joint Committee's report, including its programme of work (TIM/EFC/NP.1/14). The Timber Committee was also informed of the study tour in Turkey and the Seminar on techniques and machines for the rehabilitation of low-productivity forest (report: TIM/EFC/NP.1/SEM.18/2). It warmly thanked the Government of Turkey for the excellent organization of the session and the seminar and the most interesting study tour, as well as the other Governments which had hosted seminars since the Joint Committee's previous session, namely, Austria, Czechoslovakia, the German Democratic Republic and the USSR.

21. The Timber Committee noted that, following the reorganization of the Joint Committee which had taken place some years ago, further steps, notably to strengthen the management of the teams of specialists, had been taken to make the work of the Joint Committee still more effective.

22. The Timber Committee took note of the following seminars scheduled to be held in 1985 under the auspices of the Joint Committee:

- Seminar on methods and equipment for the prevention of forest fires, in Portugal;
- Seminar on occupational health and rehabilitation of forest workers, in Finland;
- Seminar on the mechanization of logging operations in mountainous regions, in USSR.
It noted further that, while preparation for the seminars in Finland and the USSR were well advanced, some basic information concerning the seminar in Portugal was still missing. It was considered important that countries hosting seminars should provide timely information so that the meeting may be publicized well in advance.

23. The Timber Committee also noted that a United States workshop on extension education and technical services to private forest landowners, to be held in collaboration with the Joint Committee, was scheduled to take place in 1985 and that for this workshop too, basic information had not yet been received.

24. The representative of the USSR drew the attention of the Timber Committee to the fact that a number of projects, notably in the Joint Committee's work area 2 (Wood harvesting and transport) would be completed in the course of 1985/86. The USSR would be submitting proposals for new projects in this work area with a view to maintaining the balance between the three work areas (see para. 123).

25. The Timber Committee also endorsed the recommendation of the Joint Committee Seminar on silvicultural, technological, economic and other problems connected with the mechanization of thinning operations, that the FAO/ECE Working Party on Forest Economics and Statistics be invited to consider including the question of the economic aspects of thinning operations in its programme of work (see TIM/EFC/WP.1/14, para. 17).

(b) Joint FAO/ECE Working Party on Forest Economics and Statistics: preparations for the fifteenth session

26. The Committee was informed by the Working Party's Chairman, Mr. E. Clicheroux (Belgium), that preparations for the session to be held from 1 to 4 April 1985 were well in hand and that the provisional agenda had been issued in English (TIM/EFC/WP.2/13).

27. The Committee noted with satisfaction that further information had been received to supplement the draft studies prepared by USSR experts concerning economic aspects of the fuller use of forest biomass and the economic aspects of the introduction of new forest machines and equipment.

28. The Committee was also informed that efforts were being made to reduce the workload of national statistical offices by harmonizing statistical data collection by international organizations. The Working Party would discuss developments in this area, and, if necessary, make recommendations.

29. The Working Party would also consider a new topic, the application of remote sensing for forest management, which would be the subject of a seminar in Sweden in May 1985.

(c) Meeting of the team of specialists on stress grading and finger-jointing of coniferous sawn timber

30. The Committee was informed of the results of the meeting, held in London (United Kingdom) on 9 March 1984 on the basis of TIM/R.94, by the team's Chairman, Mr. W.E. Townsley (Canada). It welcomed the fact that recently a number of countries had nominated correspondents and "contact points". It urged those countries which had not yet done so to nominate correspondents and "contact points" so that a complete list might be issued as soon as possible.
31. The Committee took note of the team's proposal that the limits for fissures in S10 grade be modified slightly (see TIM/R-94, para. 6 and annex II), but was informed that a number of countries had expressed reluctance to agree to a modification of the Recommended Standard at this stage. Furthermore, during the discussion, a number of proposals for other changes had been made. In the circumstances, the Committee agreed that an ad hoc meeting should be convened for mid-1985 to consider whether the recommended standards should be amended in the light of developments since their publication, and, if so, in what way. The proposal regarding fissures in S10 grade would, of course, be considered. The ad hoc meeting should also review recent developments, such as work by ISO and CIB W18 (see paras. 32-33) and progress in the Canada/United States in-grade testing programme, and make any necessary recommendations for future action in order to encourage the harmonization of the provisions of national standards.

32. The Committee was informed that ISO had a programme for developing structural design codes for buildings in all materials (including timber). An important aspect of this work was that these materials standards should be accepted as far as possible on a world-wide basis. Provision could however be made, where necessary, for regional or national special requirements. The ISO Council had recently recognized that single values or ranges of values may not be achievable in the first or other early editions of International Standards. The Committee was also informed that the ISO voting procedures provided for member bodies to signal that, for technical reasons, they may not be able to accept or to implement nationally particular standards which do not provide for their national practices.

33. The Committee was further informed that ISO/TC 165, Timber structures, had expressed an interest in developing the ECE Recommended Standards for stress grading and finger-jointing of structural coniferous sawn timber, for wider use. ISO would wish to await the outcome of the proposed ad hoc meeting before progressing its work to an advanced stage.

34. The Committee expressed its warm thanks to Mr. Townsley and the members of the team for their continuing active and successful work.

(d) Meeting of the team of specialists on energy derived from wood

35. The secretariat was informed of the inaugural meeting of the reconstituted team of specialists held on 11-12 April 1984, on the basis of TIM/R.95. The Committee agreed that its work on energy derived from wood should concentrate in the first instance on questions relating to the collection, transport and preparation of wood biomass, as well as its direct combustion or conversion into different types of fuel.

36. The Committee also agreed that questions of energy conservation should be dealt with separately. It invited countries to provide any readily available information on the energy conservation aspects of timber construction, including that on the energy used in the manufacture of wood products as compared with competing materials.

37. The Committee endorsed the team's proposals regarding subjects to be examined in depth (TIM/R.95, para. 9) and its methods of work, whereby drafts prepared by individual team members would be circulated for comment by other members (TIM/R.95, paras. 10-13). The delegation of Bulgaria confirmed that the Bulgarian team member, who had not been able to attend the meeting, would examine the subject suggested.
38. The Committee also endorsed the suggestion that the team next meet in April 1985 to review the studies and prepare proposals for future action.

39. Finally, the Committee took note of the election of Mr. A. Frühwald (Federal Republic of Germany) as team leader and warmly thanked him and the other members of the team for their contributions.

(e) Structure of the sawmilling industry

(i) Seminar on methodologies of data collection for the sawmilling industry

40. The Committee was informed that its team of specialists on the sawmilling industry, had met in Kotka (Finland) from 5-7 June 1984, along with a number of experts from developing countries, had reviewed the draft survey of the structure of the sawmilling industry (see paras. 43-45 below) and had proposed certain modifications to the enquiry used in collecting data, to make the enquiry suitable for use world-wide. The Committee approved the team's report (TIM/R.96) and expressed its support for the recommendation that FAO carry out a world survey of the sawmilling industry, taking experience gained in Timber Committee activities as a starting point, in order to complete FAO coverage of the basic forest industries.

41. The Committee warmly thanked the Government of Finland for hosting the meeting and for the support provided to allow the participation of experts from developing countries, as well as the Finnish Sawmill Owners' Association for its excellent organization of the seminar and associated study trips and for the generous hospitality extended to participants.

42. The Committee regretted that several team members had not participated in the meeting and stressed that when nominating members of teams of specialists, Governments should bear in mind that full participation by all members was necessary for the successful functioning of the teams.

(ii) Enquiry on the structure of the sawmilling industry: preliminary results

43. The Committee was informed of the preliminary results of the enquiry on the structure of the sawmilling industry in the ECE region (TIM/R.97). It noted that most countries had supplied rather full information of good quality.

44. The Committee urged countries which had not yet replied to the enquiry to do so as soon as possible. It requested countries to check the data in TIM/R.97 and send any corrections to the secretariat by 31 December 1984.

45. The Committee agreed with the suggestion that after this revision and any other necessary modification, the results of the enquiry should be published and presented to the Joint FAO/ECE Working Party on Forest Economics and Statistics at its fifteenth session in April 1985.
Market developments in 1984 and prospects for 1985
(Item 6 of the Agenda)

46. The Committee heard a brief statement from each delegation on recent developments in its country's economy and main forest products markets, which supplemented the written country statements. The Committee took note, during the discussion, of the Annual Forest Products Market Review (Supplement 1 to Volume XXXVII of the Timber Bulletin for Europe), prepared by the secretariat, and of the brief up-dating of the Annual Review by the secretariat in TIM/R.98 and addenda. It drew up tables of estimates for 1984 and 1985 of domestic requirements, production, imports and exports of sawn softwood and softwood logs, sawn hardwood and hardwood logs (temperate-zone and tropical), particle board, plywood, fibreboard and pulpwood. It noted that, for some countries, the estimates were prepared by industry associations or scientific institutions and not by Government agencies. A summary table of the estimates is presented in Annex I.

(a) General introduction

47. The upswing in economic activity, which first got under way in North America in late 1982, gradually spread more widely among the market economies of the ECE region during 1983 and the first half of 1984. Expansion in the United States continued at a much stronger rate than in western Europe, even though there were indications of some slackening of the rate in the third quarter of 1984. Official forecasts for 1984 for western Europe have been revised slightly upwards during the course of the year, but the recovery has remained weaker and more hesitant than in the United States.

48. Inflation rates in many west European countries have been reduced to lower levels than for a number of years and the prospects are that they can be held down in the short- to medium-term. In the United States, interest rates are currently high and there is the possibility of their rising still higher. The present strength of the United States dollar vis-à-vis other currencies, is likely to be maintained in the short term bringing with it improved export possibilities for European industries. Its position in the longer term will, however, depend on a number of factors which cannot yet be assessed.

49. The recovery in western Europe has not been accompanied by a revival in new dwelling construction, although in several countries investment is growing in construction as a whole as well as in industry and other sectors of the economy, notably those oriented towards exports.

50. The countries with planned economies in eastern Europe and the USSR increased their aggregate Net Material Product by some 4 per cent in 1983, and a slightly higher rate of growth is foreseen for 1984, representing an upturn in the pace of expansion compared with the preceding few years. Investment may have been expanding at higher rates than planned: much of it is related to structural changes needed to bring about higher over-all efficiency in the economies.
51. Many of the external factors which have been influencing, whether in a positive or negative way, the forest products market in recent months, are likely to remain during the coming year, including a further slowing down of the United States economy, slow and hesitant growth in western Europe, containable levels of inflation, high interest rates and unemployment levels, and dwelling construction activity well below the average of the past decade. This suggests that most forest products markets will remain highly competitive. Suppliers and their customers will need to continue to approach the market with caution and they should recognize the need to maintain reasonable levels of profitability for all concerned in order to reinvest for the future strength of the sector.

52. The Committee stressed the need for all parts of the sector to work together to develop new uses for wood products and to promote their use in existing applications.

(b) Sawn softwood and softwood logs

53. The moderate improvement in European consumption of sawn softwood in 1983, after three years of decline, is expected by the Committee to be followed by a slight decline over the two following years. The estimate of domestic requirements of 73.9 million m$^3$ for 1985 is 1.9 million m$^3$, or 2.6 per cent less than in 1983 but still above the depressed 1982 level. The steep recovery in North America in 1983 is being followed by more modest growth in 1984 and a downturn in domestic requirements in 1985 to 96.5 million m$^3$, which would be a little below the 1983 level.

54. In both Europe and North America, trends in production and trade are expected to reflect those of domestic requirements, although the downturn in Europe’s requirements in 1984 is preceding that in production, which should become apparent in 1985. The expected drop in European output next year amounts to 1.2 million m$^3$ of which Sweden alone accounts for 900,000 m$^3$. A number of exporting countries in Europe announced steps to curtail output of whitewood sawnwood, which, it was stated, could not under current international market conditions be produced at a profit in their countries.

55. Levels of real consumption may not vary very much between 1983 and 1985, and the decline in domestic requirements could be explained by some lowering of stocks along the chain of supply in importing countries. Exporters, some of whose stocks were at exceptionally low levels at the beginning of 1984, have been rebuilding towards more normal levels and expect this to allow them to offer better service to their customers. At least during the first half of 1984, production of sawn softwood in North America outstripped consumption, stocks increased and prices fell sharply between the spring and the autumn.

56. The production of softwood logs in Europe is expected to be adequate to meet anticipated demand from the sawmilling industry, with a modest rise in 1984 followed by a fall of a similar scale in 1985. Trade will decline by about 10 per cent in 1984, partly as a result of the ending of clearance work on storm-damaged timber in a number of countries and partly of reduced import demand in some of the leading importers. In 1985 there is forecast to be a further decline in European exports. North American softwood log exports are expected to level out on a high plateau in 1985 after a strong rise in 1984. Those of the USSR will also level out after falling in 1984.
57. In the course of the discussion, it was pointed out that there was forecast to be only a slight decrease in domestic and import requirements of sawn softwood in Europe in 1984 and 1985, and that this signified rather stable market conditions. Weak demand from some sectors, such as new dwelling construction, was being offset by stronger demand from others, such as repairs, maintenance and do-it-yourself.

58. In Europe the contrast between the markets for redwood and whitewood continued to be marked by a substantial price differential, which could not be explained by differences in quality. Efforts were being launched by some exporting countries to strengthen the marketing of whitewood, but it was felt that the price differential would persist.

59. Concern was expressed at the downturn in the share of timber-frame dwellings built in the United Kingdom as a result of adverse publicity. This showed the need for the timber and allied trades to work together actively to demonstrate the inherent benefits of this type of construction. A similar approach was needed where other end-use sectors were threatened, for example wooden floor joists by concrete beams.

60. Some exporting countries considered that, after the growth of recent years, sales prospects to countries in North Africa and West Asia still remained promising.

61. The delegation of the Federal Republic of Germany stated that the felling of trees with damage attributable to air pollution had been offset by a reduction in planned fellings elsewhere; no additional supplies of softwood logs would have to be placed on the market, at least in 1985.

62. The Committee concluded that supply and demand for sawn softwood on the European market were fairly well balanced for this year and 1985. Problems of oversupply did exist for whitewood, but several European producer countries were taking measures to reduce production substantially. The present oversupply was considered to be a temporary phenomenon partly due to the lowering of stocks in some importing countries. Because there seemed little prospect for a significant upturn in sawn softwood demand in 1985, consumers and importers were likely to continue purchasing on a hand-to-mouth basis. Exporters' interests would be best served by not forcing the pace of selling in the forward market.

(c) Hardwoods (temperate-zone and tropical)

63. Recessionary trends had prevailed in the hardwood sector in Europe and North America since 1980. In the United States they came to an end with the sharp recovery in 1983 when apparent consumption and production of sawn hardwood rose by nearly 20 per cent. In Europe, the beginnings of recovery were more hesitant. After the downward trend had flattened out in 1982, consumption rose marginally in 1983 and imports and exports rather more strongly. Production, on the other hand, continued to decline further.
64. For 1984, the Committee expects European requirements to decline slightly, mainly due to an expected fall in imports to nearly the level of 1982. For production, on the other hand, a small increase, and for exports a larger one, were forecast. Increases of some 2 per cent were estimated for European requirements, production and imports of sawn hardwood in 1985. Exports were forecast to remain unchanged.

65. In the United States, requirements and production of sawn hardwood in 1984 were expected to rise further, though less sharply than in 1983. For 1985, the Committee expected continued growth of the sawn hardwood market in the United States, though at a further reduced pace, with requirements and production rising by a few percentage points. A marked rise was also expected for exports to the record level of 17 million m³.

66. The European hardwood log market was characterized in 1983 by a marginal increase in consumption and imports, and an equally marginal decrease in production and exports.

67. For 1984, the Committee expected a further, somewhat larger rise in requirements. For 1985, the Committee expected a basically unchanged situation for the European hardwood log market, with small increases of the order of 1 per cent for requirements, production and imports, while no change was forecast for exports.

68. During the discussion, the Committee noted the effect which the appreciation of the United States dollar against most other currencies was having on European imports from dollar or dollar-linked regions, and which in turn was resulting in a widening gap between prices of European domestic hardwoods and those from North America and certain tropical regions.

69. In connection with recent severe storm damage and related calamities to hardwood forests in some countries, it was pointed out that the prevailing high demand for good quality hardwoods, as well as adjustments in felling programmes, had largely prevented disruption of the markets.

70. Reference was also made to the role of sea freight rates for trade, and certain distortions in freight structures which caused disadvantages to certain supplying areas, notably west Africa. Important changes were taking place in the trade in tropical hardwoods with the build-up of processing industries' consumption in hardwood producing countries. New importing as well as exporting areas were making their appearance as well as new trade flows, for instance, between west Africa and east Asia.

71. Concern was expressed by one delegation over the continued existence of barriers to trade, for instance in the field of phyto-sanitary regulations.
(d) **Wood-based panels**

72. The Committee expects that the modest recovery recorded in 1985 which had brought back consumption of wood-based panels as a whole in Europe to the level of 31.96 million m$^3$, will continue in 1984. European domestic requirements in 1984 are estimated to rise by 0.3 per cent and production somewhat more strongly, by 1.8 per cent. A further small rise of 1.6 per cent in European requirements of wood-based panels as a whole is also forecast by the Committee in 1985 and a larger one, of 2.3 per cent for production. The expected increase in requirements of 500,000 m$^3$, is due to a rise in requirements of particle board of 440,000 m$^3$, and of fibreboard of 140,000 m$^3$.

73. Concerning the development of individual products between 1983 and 1985, European requirements and exports of plywood are expected to remain practically unchanged, production to grow by 3.1 per cent and imports to decline slightly. For fibreboard, an increase in requirements of 3.4 per cent in imports of 3.7 per cent and in production of 5.7 per cent is foreseen, while exports are expected to grow more strongly, by nearly 13 per cent.

74. The United States' market for wood-based panels is estimated by the Committee to show a somewhat different development between 1983 and 1985. For 1984, a further rise in requirements of 3.88 million m$^3$, or nearly 13 per cent, is forecast, followed by a decline of 3.00 million m$^3$ in 1985.

75. The Committee noted that market penetration in Europe of the established panel types seemed to have reached saturation level in the majority of end-uses. Furthermore, several of the main end-use sectors, e.g. furniture, were increasingly affected by imports of corresponding manufactures from regions outside Europe. Timber-frame construction, an important outlet for panels, in particular plywood, was experiencing a setback in the United Kingdom due to adverse publicity. In addition, the particle board industry was having once again to explain its position with regard to formaldehyde emissions.

76. More active development of new applications of existing panel types was needed. It was further considered that there was a need to develop new, more advanced types of panels, notably composite panels. In this connection, marked changes were taking place in the North American industry where a variety of new panels were increasingly substituting softwood plywood in building construction.

77. It was pointed out that despite the extensive restructuring of the industry in recent years in Europe, and the reduction in the number of mills, capacity had not been reduced to the same extent, and overcapacity remained an acute problem. The markets were therefore in an unbalanced state, with standard-type panels being traded at depressed price levels. There was also a danger that the demand potential for certain new types of panels, notably MDF, had been over-estimated and that excess capacity had been installed.

78. In discussing these various aspects, the Committee considered that there was a need, for more detailed statistical coverage of the wood-based panels sector in order to permit a thorough analysis of the market. It recognized, however, that numerous problems relating to classification, definitions and collection of data remained to be overcome before this could be achieved.
79. The markets for woodpulp were strong in 1983 and the first half of 1984, with high levels of capacity utilization in most countries. Pulp prices (expressed in dollars) rose sharply in the first half of 1984. Pulp production was expected to remain at these high levels into 1985, although no further price rises are expected at present. Pulp stocks had risen to normal levels. Demand for waste paper has been very strong.

80. The Committee foresees a further rise in domestic requirements of pulpwood (including both roundwood and chips) in 1984 and 1985, in both Europe and North America. In Europe they are expected to rise to 166.9 million m$^3$ (+5.9 per cent) in 1984 and to reach 171.0 million m$^3$ (+2.5 per cent) in 1985. In the United States of America the corresponding estimates are 201.1 million m$^3$ (+4.9 per cent) and 206.2 million m$^3$ (+2.5 per cent).

81. Domestic supply of all types of pulpwood is expected to expand in line with requirements and should be adequate to meet foreseen demand although some problems are being encountered in some countries with qualities for mechanical pulping. There have been no further reports of the reluctance by private forest owners to fell which had constrained supplies in some countries in recent years. Higher prices are mobilizing pulpwood supplies and fiscal and legal measures to this end have also been introduced in the Nordic countries. The economics of thinning have been improved by the demand for energy wood and in Sweden also by promising developments in thinning methods and machines.

82. In 1984, European pulpwood imports are expected to recover slightly and to remain roughly stable in 1985. Exports are estimated to rise rather more sharply (+8.5 per cent), but to fall by a similar percentage in 1985. The latter decline is essentially due to Czechoslovakia, which forecast a decline in export availability in 1985 of 0.64 million m$^3$, due to the coming on stream of new domestic pulp capacity.

83. The United States of America forecasts a continuance of the decline in its pulpwood exports due to developments in Japan which is modifying the structure of its pulp industry, diversifying the sources of its pulpwood imports and increasing domestic fibre supply. The United States of America also forecasts a rise in pulpwood imports of 1.31 million m$^3$ (35 per cent): it is thus expected to become a net importer of pulpwood in 1984.

84. It has so far been possible to absorb extra supplies of roundwood caused by forest damage such as windblow, snow break or air pollution, without disrupting the markets, although it had been necessary to modify felling schedules and downward pressure on prices had been experienced locally.

85. It was pointed out that harvesting operations usually produced simultaneously both sawlogs and pulpwood as well as, increasingly, energy wood. The markets for the different assortments therefore interacted and analysis should take this into account.
The Committee agreed that in many cases pulpwood markets were dominated by local factors, such as the opening or closing of a pulpmill or the consequences of forest damage. The Committee was informed of a number of these factors affecting particular markets or trade flows.

A number of countries informed the Committee that their markets for wood for energy were expanding steadily.

Points arising from the discussion of market developments

The Committee was informed of the response to its request, made in October 1983, that countries include in their market statements for the present session data on production and trade of medium density fibreboard (MDF) and medium board, as well as on wood preservation. The Committee noted that the response in the case of fibreboard had been more positive than that for wood preservation. Replies from countries had indicated that few data for wood preservation were available. The Committee agreed that the Joint FAO/ECE Working Party on Forest Economics and Statistics be invited to consider in detail, on the basis of the experience gained at the Committee session whether relevant data on these subjects should be collected by the Committee, and, if so, what methods might be adopted.

It was pointed out that statistics on the wood-based panel sector, as for other sectors, were supplied by enterprises or customs officers and collected either by Government agencies or by industry associations. The latter's data were collected and disseminated at the international level by international industry associations such as FEIC, FEROPA and FESYP (for plywood, fibreboard and particle board respectively). The Committee invited the secretariat to contact interested organizations, including the three mentioned above, to discuss whether there were ways of improving the quality of information concerning the wood-based panels sector available at the international level, bearing in mind not only the desires of users of statistics but also the necessity not to overload the producers of statistics.

It was noted that the membership of the Drafting Committee which gave preliminary consideration to the part of the Committee's report concerning the markets had been unchanged for many years. The Committee suggested that this membership might be modified, perhaps by the inclusion of experts from southern Europe and by strengthening the Drafting Committee's expertise for products other than sawn softwood.

It was also pointed out that the Committee's review of the markets for pulpwood was not based on an authoritative review or quantified forecasts for the pulp and paper sector. The Committee invited its office-holders to consider whether this situation should be changed, for instance by requesting an expert on the pulp and paper sector to address the Committee or by requesting forecasts for pulp production in the Timber Committee questionnaires.

It was pointed out that developments in Japanese markets continued to interact, sometimes strongly, with those of ECE member countries. It would therefore be most valuable to have active Japanese participation in the market discussions as well as other parts of the Committee's work. The Committee therefore requested the secretariat to invite the Japanese authorities to nominate an expert to attend the forty-third session and to present a report on the forest products market in his country.
Forest damage (Item 7 of the Agenda)

(a) Special topic: assessment of damage to forests and loss of wood raw material from different causes

93. Mr. G. Calabri (Italy) presented to the Committee his country's experience of damage caused by forest fires. He explained that almost all Italian regions were vulnerable to fire damage and that the area of forest land destroyed by fire, after having reached a peak in 1982, had since decreased considerably, partly due to favourable weather conditions in 1984.

94. He listed a number of preventive measures adopted, such as the reinforcement of special forest regulations against arson. He also described the methods used for detecting and fighting fires, especially the growing utilization of aircraft. He noted the difficulties encountered in damage assessment, which in most cases is limited to losses in wood production and to re-establishment costs. Other losses relating to soil protection, watershed management, effects on climate and landscape, tourism and recreation were considered more important under Italian conditions but difficult to estimate.

95. Mr. J. Kozinski (Poland) informed the Committee of the measures taken in his country to combat insect infestation. He noted that the extensive spraying of chemicals to combat the spruce moth during the past years, in spite of unfavourable weather conditions, had given encouraging results. In 1984 only small local centres of infestation persisted and would continue to be chemically treated. He explained that secondary infestations of Polish forests by certain species of insects and fungi was still considerable all over the country and that a methodical and comprehensive campaign against them was being carried out. The measures taken included sanitation fellings and the use of traps. It was expected that sanitation fellings would start decreasing as from 1986 to attain normal levels in 1987 or 1988. He also informed the Committee of the methodology used to evaluate forest damage in Poland. A full report on this subject would be submitted to the fifteenth session of the Joint FAO/ECE Working Party on Forest Economics and Statistics.

96. Mr. E. Kaufmann (Switzerland) informed the Committee of the methodology and results of the "Sanasilva" programme for the observation of the state of health of the Swiss forest. A sampling survey of over 1,400 forest districts was carried out in 1983. Samples of spruce needles were also examined in order to obtain a measure of air pollution and nutritive elements. Fourteen per cent of trees were found to be damaged, with regional concentrations increasing from west to east. These concentrations corresponded to areas where pollution was more intensive. No correlation was found between damage to trees and lack of nutritive elements. In the light of these findings the "Sanasilva" programme had been extended for a period of four years and annual surveys will make it possible to determine variations in space and time.

97. The Committee warmly thanked the lecturers who had presented the Committee with most valuable and interesting information. It requested the lecturers to transmit the final versions of their presentations to the secretariat who would make them available to interested experts on request.
(b) Implications of air pollution damage to forests for wood supply and forest products markets: results of enquiry

98. The Committee was informed that, in accordance with its instructions at its forty-first session (ECE/TIM/23 paras. 108-110), an enquiry had been circulated to national correspondents. It had emerged from the replies to this enquiry that countries, with very few exceptions, while conscious of the seriousness of the problem, were not yet able to provide any quantitative estimates or even to evaluate in qualitative terms with any degree of certainty the implications of air pollution damage to forests for wood supply and forest products markets. In the absence of information from countries, Mr. W.E. Pleines, consultant to the secretariat, had prepared an estimate of the area of forest damage in the light of the most recently available data, estimates of the possible quantities of sanitation fellings in 1984, and two scenarios for the short to medium term (TIM/R.100). The secretariat had also prepared some tentative long-term scenarios (TIM/R.100/Add.1) which were intended, amongst other things, as a preliminary approach to these problems in the long-term timber trends study (see paras. 111-114) a first draft of which was due for completion by the end of 1984. The reactions of an informal meeting of experts held on 4 October 1984 to these documents were also made available to the Committee.

99. In the ensuing discussion a number of delegations informed the Committee of the forest damage situation in their countries, presenting the results of the most recent studies of the extent of damage and of investigations into the causal mechanism of the damage. A number of countries reported that the damaged area was increasing disturbingly fast and affecting broadleaved as well as coniferous species. In this context, one delegation reminded the Committee that most "affected" forests were not destroyed but contained a certain percentage of damaged trees, some of which with only light damage. The same delegation felt that the common practice of adding together the areas with affected, damaged and dead trees and expressing the total as a percentage of total forest area might, due to misunderstanding by the consumers, bring the wood market nearer to collapse than necessary. A few delegations indicated that the data for their countries in TIM/R.100, table 1, were incorrect or based on unofficial estimates and offered to transmit to the secretariat the best available estimates.

100. Delegations stressed that even though the causal mechanisms of the damage were not yet clearly understood, the only way significantly to reduce forest damage attributed to air pollution was by reducing emissions of pollutants. Action needed to be undertaken at the national and international level. The Committee was informed of the results of the second meeting of the Executive Body of the Convention on Long-Range Transboundary Air Pollution which had, amongst other things, reviewed a report on forest damage (EB.AIR/WG.1/R.4/Rev.1), set up a working group to draft a specific agreement on sulphur emission reduction and included nitrogen oxides more fully in its work programme. Delegations strongly supported the work of the Executive Body, as well as of the FAO, notably its ad hoc Working Group on "Impact of Air Pollution on Forests" established by the European Forestry Commission, which was concentrating on developing methods for evaluating and monitoring damage. Delegations stressed that the problem was international and needed international solutions, and welcomed the continuing close co-operation in this field between the Executive Body, the FAO and the Timber Committee.
101. So far, there had been no surplus of roundwood on the market resulting from air pollution damage, as regular cutting programmes had been adjusted to take account of sanitation fellings. Nevertheless, as it was not certain that this situation would continue, delegations reaffirmed that there was a need for international co-operation on the impact of air pollution damage on wood supply and roundwood markets, and that the Timber Committee was the appropriate body to carry out this work.

102. The Committee, therefore decided to constitute a team of specialists on this subject, which would review the situation on the basis of the information available to it and make recommendations for future work by the Committee, the team itself or other bodies. It was stressed that as the problems were complex and rapidly evolving, the team should be left to decide itself on the initial direction of its work and to act accordingly, as the Committee was not yet in a position to give indications on this subject. The team should report back to the Committee's forty-third session in October 1985.

103. Countries which wished to nominate an expert to the team were requested to transmit the name to the secretariat before 31 December 1984. The secretariat should convene the team's first meeting early in 1985.

104. Countries were also requested to transmit to the secretariat by 31 December 1984:
- any necessary corrections to the data referring to their country in TIM/R.100;
- comments on the methodology and results of TIM/R.100 and Add.1;
- suggestions for activities by the team;
- any national studies considered relevant to the questions under consideration.

This information would be most useful to the team of specialists.

105. The Committee noted that the informal meeting mentioned in para. 97 had considered that the scenario-based approach adopted in TIM/R.100 and Add.1 was the only approach possible, given the scarcity of established facts on which to base forecasts. Some delegations, however, expressed concern that the use of scenarios could be counterproductive, as many readers would not distinguish between scenarios and forecasts. This could increase rather than diminish disturbances of the roundwood markets.

106. The Committee invited the team of specialists to give special attention to these questions when deciding on the direction of its work. It was pointed out that in the context of the timber trends study, it would be necessary to construct some scenarios relating to the possible impact of damage to forests, although the degree of uncertainty surrounding them would be clearly explained.

107. One delegation pointed out that although these problems appeared to be most acute in Europe, the team should also be aware of the situation and problems of North America.
(c) Measures to be taken in the event of sudden and severe damage to forests

108. The Committee was informed, on the basis of TIM/R.101, of the follow-up to the forty-first session's decision to establish a project on measures to be taken in the event of sudden and severe damage to forests. The Committee noted that not all countries had transmitted to the secretariat relevant publications or reports describing the technical, economic, social or fiscal measures taken in reaction to sudden and severe damage to forests, lists of institutions whose advice or assistance could be useful in such cases and the address in their country to which the information on such damage should be sent. The Committee reiterated its invitation to countries, which had not yet done so, to transmit to the secretariat the information requested above.

109. A certain number of countries expressed their intention to send to the secretariat available reports on their experiences of sudden and severe damage to their forests.

110. The Committee urged countries which experienced such damage, especially when such damage was expected to result in significant market impact, to make use of the system set up, by sending to the secretariat information on the subjects listed in the suggested outline in TIM/R.101, annex IV as soon as practicable after the damage occurred.

111. The Committee agreed to review progress achieved on this project at its forty-third session.

Study of European timber trends and prospects: progress report (Item 8 of the Agenda)

112. The Committee was informed of progress on the study (referred to as ETTS IV), on the basis of TIM/R.102. The period between the Committee's forty-first and forty-second sessions had seen the end of the period of organization, data collection and enquiries and the beginning of writing up the first draft of the study. Work was well advanced on roundwood supply forecasts, the outlook for non-wood benefits, forest demand models prepared in conjunction with FAO, and energy questions.

113. During the period in question, three mini-seminars had taken place, concerning Finland, Poland and Switzerland. Countries had continued to contribute most generously to the success of the study, by the secondment of experts, by contributing to the secretariat's travel expenses and by contributions to the ETTS IV Trust Fund, as well as through the invaluable contributions of national correspondents. The Committee expressed its warm appreciation to all those individuals, institutions and Governments who were contributing to the preparation of the study.

114. The Committee welcomed the continuing co-operation in the field of outlook studies with other international organizations, notably IIASA.
115. The Committee approved the following timetable for the study:

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Details</th>
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<tbody>
<tr>
<td>April–June 1985</td>
<td>Circulation of draft study, in English, French and Russian</td>
</tr>
<tr>
<td>26–30 August 1985</td>
<td>Review meeting (co-sponsored by the Timber Committee and the FAO European Forestry Commission)</td>
</tr>
<tr>
<td>October 1985</td>
<td>Discussion of ETTS IV by the Timber Committee on the basis of the report of the review meeting</td>
</tr>
<tr>
<td>Late 1985</td>
<td>Discussion of ETTS IV by the European Forestry Commission on the basis of the report of the review meeting</td>
</tr>
<tr>
<td>Early 1986</td>
<td>Publication of ETTS IV, revised as necessary in the light of comments by the review meeting and the sponsoring bodies. (The timing of publication will be determined by the extent of revision.)</td>
</tr>
<tr>
<td>October 1987</td>
<td>Joint session of the Timber Committee and the European Forestry Commission to discuss policy implications of the study.</td>
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</table>

Activities of other Principal Subsidiary Bodies of ECE of interest to the Timber Committee (Item 9 of the Agenda)

116. The Committee was informed, on the basis of TIM/R.103, of the activities of other Principal Subsidiary Bodies of ECE dealing with matters of concern to it. The Committee took note of this information and agreed to take it into account when discussing its own programme of work.

Programme of work for 1985–1989 (Item 10 of the Agenda)

(a) Proposals submitted to the thirty-ninth session of the Commission

117. The Committee carefully examined the proposals for its programme of work referred to it by the thirty-ninth session of the Commission as set out in TIM/R.104. The Committee gave its support to the proposals for the reformulation of the programme, as set out in annex I to TIM/R.104, with the following modifications:

(i) in the title of subprogramme 14.4, delete the phrase "including pulp and paper" (for explanation, see paras. 117–118 below);

(ii) transfer programme element 14.4.3. - Rational use of wood biomass and the reduction of losses, to subprogramme 14.5; and programme element 14.5.2. - Energy conservation and self-sufficiency in the mechanical wood-processing industries, to subprogramme 14.4.

The Committee's proposal for the revised programme is set out in annex II.
The Committee considered the proposal for extending the scope of its activities to include woodpulp, paper and paperboard in a more comprehensive way than hitherto. It was informed that its Office-holders had met on 8 October 1984 and were joined by the heads of delegation of a number of countries interested in this matter. Mr. Froncillo (Italy), who had chaired the meeting, reported on its findings. The purpose of the meeting had been to prepare draft recommendations on the basis of which the Committee could debate the position to be taken on the proposal.

The Committee unanimously agreed with the findings of the meeting, namely:

1. The Committee is already covering many pulp and paper aspects in its programme of work, notably in the long-term studies and the system of statistical reporting.

2. There is continuing co-operation between the Committee and international bodies dealing specifically with pulp and paper, notably the FAO Advisory Committee on Pulp and Paper and the OECD Ad hoc Working Party on Pulp and Paper. When it required more specialized information, for example on competition for raw material between forest industries, it could call on the expertise of these and other appropriate bodies.

3. Enlargement of its activities in the way proposed would place a heavy extra burden on national resources.

4. The secretariat was already fully stretched in carrying out the present programme of work. If new activities were to be undertaken, additional resources would therefore have to be made available.

5. The Committee’s programme of work in its present form was well balanced and broadly corresponded to countries’ requirements.

6. The present programme, adapted in the way proposed in para. 116 should be retained without further changes.

In response to the request for comments on the impact and usefulness to Governments of the publications which were issued in accordance with its programme of work, the Committee agreed that both the statistical and other types of publications in the Timber Bulletin for Europe series were a most valuable source of good quality information on the forestry and forest products sector. It recommended that the coverage of information provided by the present range of publications should be maintained, while expressing the hope that their visual presentation could be improved. In this connection, it noted with interest that the secretariat was examining possible changes to the way in which the publications were issued, which would be put into effect in 1985.

(b) Review and revision of the draft programme of work for 1985-1989

The Committee considered its programme of work on the basis of the draft prepared by the secretariat in annexes III and IV of TIM/R.104, which took into account the programme adopted at its forty-first session, the proposals referred to it by the thirty-ninth session as well as the decisions taken at that session, the results of meetings of the Committee’s subsidiary bodies. The Committee also
took into account its own discussions and decisions under other items of the agenda. It approved its programme of work for 1985-1989 as set out in annexes II, III and IV. 1/

122. The Committee noted with appreciation the offer, subject to confirmation, of Sweden to organize the 1985 Timber Committee study tour to coincide with the International Fair "ELMIA WOOD 1985" in May 1985. It invited Sweden to confirm this invitation as soon as possible and requested the secretariat to co-operate with the Swedish authorities in carrying out the necessary preparations. It invited other countries to consider the possibility of organizing a study tour in 1986 and later years and to forward their offers to the secretariat.

123. With regard to project 14.1.3. - Trends, prospects and policies in forestry and forest products in southern Europe, the Committee urged the countries concerned to reconsider the possibility of hosting an ad hoc meeting on a topic related to the production and marketing of products of specific interest to Mediterranean forestry.

124. The Committee referred to the Steering Committee of the Joint FAO/ECE/ILO Committee on Forest Working Techniques and Training of Forest Workers the following proposals for projects in programme element 14.3.2. - Wood harvesting and transport:

(1) Technological, economic and social aspects of using multi-functional machines in logging operations;

(2) Technological, economic and social aspects of the harvesting and primary conversion of wood.

125. The Committee noted that Romania, the lead country in its project on economic and technical developments in the furniture industry, which was now incorporated in project 14.4.1. - Development and introduction of new technologies in the wood-working industries, including furniture, had prepared proposals for activities in this field. It had not yet been possible, however, to establish a team of specialists with satisfactory representation from among ECE member countries. It agreed that countries should be invited again to nominate experts to join the team. It supported the proposal to organize a seminar, possibly in 1987 or 1988, on the furniture industry and noted with appreciation that Romania was prepared to consider the possibility of hosting it. It agreed that one of the first tasks of the team of specialists should be to draw up proposals for the scope and programme of the seminar.

126. The Committee heard with interest that Hungary had undertaken a study on the use of forest products, notably lower quality hardwoods, in agricultural constructions and was considering what contribution it might be able to make under project 14.4.2. - Development of new products, markets and applications for forest products, including possibly the hosting of a seminar on this topic. It would inform the secretariat of the outcome within a few months.

1/ The Committee's programme of work is presented in three forms:

Annex II. A brief presentation of the programme, at the 3-digit level, for discussion by the Commission.

Annex III. The full presentation of the programme, at the 4-digit level.

Annex IV. A tabular presentation of the programme, at the 4-digit level.
127. The Committee was informed that the United States was considering the possibility of hosting a seminar, which would also fall within project 14.4.2., the theme of which could be the matching of end-users' quality and specification requirements for lower-quality hardwoods with growers' and converters' supply possibilities. It invited the United States delegation to discuss this matter further with the secretariat, so that this possibility and the one being considered by Hungary could be reviewed by the office-holders at their meeting in spring 1985.

Other business (Item 11 of the Agenda)

128. The Committee recalled the importance it attached to the work carried out by the teams of specialists and that in some cases team members had not participated actively in the team's work (see, for instance, para. 42 above). The Committee reminded delegations that when team members were nominated they accepted certain obligations, notably to participate actively in the work and meetings of their teams. The Committee requested delegations to bear this in mind when nominating members of teams of specialists.

129. The delegation of the USSR presented a film on the activities of the export organization v/o Exportles. The Committee thanked the delegation warmly for this interesting film.

Adoption of the report of the Committee's session (Item 12 of the Agenda)

130. The draft report presented by the secretariat was adopted, with some modifications which have been incorporated into the present document.

Date of next session

131. The Committee agreed that its next session should be held from 14 to 18 October 1985, subject to the availability of conference services for that period.
### Annex 1 - Annexe 1

Europe (excl. USSR) : Summary table of market forecasts for 1984 and 1985

Europe (moins URSS) : Tableau recapitulatif des previsions du marché pour 1984 et 1985

(million m$^3$ - millions m$^3$)

<table>
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<tr>
<th></th>
<th>Domestic requirements</th>
<th>Production</th>
<th>Imports</th>
<th>Exports</th>
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<td>(actual) / (estimates)</td>
<td>(actual) / (estimates)</td>
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<tr>
<td></td>
<td>(reels) / (previsions)</td>
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<td>72.15 / 72.17 / 70.94</td>
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<td>23.34 / 22.61 / 22.34</td>
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<td>117.16 / 119.25 / 116.87</td>
<td>5.16 / 4.65 / 4.63</td>
<td>3.27 / 2.94 / 2.81</td>
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<td></td>
<td></td>
<td>2.31 / 2.24 / 2.37</td>
<td>2.26 / 2.57 / 2.58</td>
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<tr>
<td>- tropical zone</td>
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<td></td>
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<td>0.29 / 0.28 / 0.28</td>
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<td>Hardwood logs</td>
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<td>33.16 / 34.62 / 35.11</td>
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<tr>
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<td></td>
<td>2.49 / 2.57 / 2.65</td>
<td>2.17 / 2.33 / 2.33</td>
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<tr>
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<td></td>
<td>4.04 / 4.01 / 4.03</td>
<td>0.08 / 0.08 / 0.07</td>
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<td>22.41 / 22.79 / 23.30</td>
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<td>4.37 / 4.79 / 4.75</td>
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<td>43.70 / 45.22</td>
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<tr>
<td>and particles</td>
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</table>

Sciages resineux

Gruaes de resineux

Sciages feuillus

- zone temperée *

- zone tropicale *

Gruaes de feuillus

- zone temperée *

- zone tropicale *

Panneaux de particules

Contreplaques

Panneaux de fibres

- Durs

- Isolants

Bois de trituratation

- Bois ronds

- resineux *

- feuillus *

- Dechets,plaquettes

et particules
Sub-programme 14.1: Medium- and long-term trends, prospects and policies for forestry and forest products

Programme elements
14.1.1 Appraisal of medium- and long-term timber trends and prospects
14.1.2 Medium-term trends in the structure and capacity of the wood-processing industries
14.1.3 Trends, prospects and policies in forestry and forest products in southern Europe

Sub-programme 14.2: Current forest products market developments and short-term prospects, including international trade

Programme elements
14.2.1 Review of production, trade, consumption and prices of forest products
14.2.2 Standardization in the forest products sector

Sub-programme 14.3: Forest working techniques and training of forest workers

Programme elements
14.3.1 Silvicultural operations and general management aspects
14.3.2 Wood harvesting and transport
14.3.3 Vocational training, applied ergonomics, safety and health

Sub-programme 14.4: Economic, technological and managerial issues for the wood-working industries

Programme elements
14.4.1 Development and introduction of new technologies in the wood-working industries, including furniture
14.4.2 Development of new products, markets and applications for forest products
14.4.3 Energy conservation and self-sufficiency in the mechanical wood-processing industries
14.4.4 Management techniques in the wood-working industries

Sub-programme 14.5: Environmental and resource conservation issues

Programme elements
14.5.1 Quantification and evaluation of the environmental benefits of forests
14.5.2 Rational use of wood biomass and the reduction of losses
14.5.3 Implications of air pollution damage to forests for the forest and forest products sector
14.5.4 Measures to be taken in the event of sudden and severe damage to forests

Sub-programme 14.6: Forest and forest products economics and statistics

Programme elements
14.6.1 Publication of the Timber Bulletin for Europe
14.6.2 Selected problems of economics and statistics of forestry and forest products
14.6.3 Forest resource analysis
14.6.4 Transfer of economic and statistical methods and experience in the forest and forest products sector
This programme is carried out by the Timber Committee and its subsidiary bodies. The Committee meets annually, usually in October. In addition to the activities specified under the individual programme elements or sub-elements, the Committee also furthers the dissemination and exchange of information and experience by organizing study tours at the invitation of the governments concerned.

**SUB-PROGRAMME 14.1: MEDIUM- AND LONG-TERM TRENDS, PROSPECTS AND POLICIES FOR FORESTRY AND FOREST PRODUCTS**

14.1.1. **Appraisal of medium- and long-term timber trends and prospects**

**Description:** The Committee will keep under review and up-date projections and forecasts of long-term trends in production, trade, consumption and prices of forest products, comparing them with projections made in previous long-term studies. The studies will provide governments with the latest projections and forecasts of long-term prospects at the regional and sub-regional level as a framework for national studies and as a basis for drawing up national policies for the forest and forest products sector. Amongst other factors, the Committee's analyses will take into account the impact of air pollution on the forestry and forest products sector, including the prospects for future wood supply.

**Work accomplished:** Work continued on the new long-term study, including the setting up of national teams of correspondents to participate in the work, collection and preliminary analysis of information, comparison of real trends up to 1980 with projections made in the previous study, the holding of an ad hoc meeting on the impact of energy developments on the forestry and forest products sector and contacts between the secretariat and national correspondents and other experts, including the holding of "mini-seminars" in a number of countries.

**Work to be undertaken:** Work on the new study will continue, including the preparation of the draft of the study with target dates of 1985 for review by an ad hoc meeting (jointly with the FAO European Forestry Commission) and 1986 for final publication. The Committee will hold a joint session with the European Forestry Commission in 1987 to consider the policy implications of the findings of the study.

**Duration:** Continuing.
Medium-term trends in the markets for specific forest products

Description: The Committee will review medium-term (3-5 years) trends in the production, consumption, trade and prices of major forest products so that governments may be continuously informed of structural trends in the forest products markets of the ECE region. The medium-term surveys will allow recent trends to be compared with the projections made in the long-term studies (project 14.1.1.1.) and provide early warning to governments of deviations from expected developments.

Work to be undertaken: Further medium-term surveys will be postponed until after completion of the long-term study (project 14.1.1.1.). Thereafter, they will be resumed on a 3-year rotation of the following sectors: sawnwood and sawlogs; wood-based panels; and pulpwood, wood for energy and miscellaneous roundwood.

Duration: Continuing after 1985.

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

14.1.2.1. The wood-based panels industries

Description: The Committee will keep the structure and capacity of the wood-based panels industries under review 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.

Work accomplished: The results of the latest enquiry were published.

Work to be undertaken: The next enquiry will be circulated in 1985 and the results published in 1986.

Duration: Continuing.

14.1.2.2. The sawmilling industry

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

Work accomplished: Preliminary results of an enquiry on the structure of the sawmilling industry were reviewed by the seminar on methodologies of data collection for the sawmilling industry, held in Finland in June 1983. The seminar was attended by members of the team of specialists on sawmilling questions and participants from developing countries.

Work to be undertaken: After review by the forty-second session of the Committee, the results of the enquiry will be published. Proposals for future activities, including the carrying out of a further enquiry, will be discussed by the fifteenth session of the Joint FAO/ECE Working Party on Forest Economics and Statistics.

Duration: To be decided.
14.1.3. **Trends, prospects and policies in forestry and forest products in southern Europe**

**Description:** The forest and forest industry policy and environmental problems facing countries in the Mediterranean area will be reviewed in the light of the long-term outlook for their forest economies, as depicted in *European Timber Trends and Prospects, 1950 to 2000*.

**Work to be undertaken:** The Committee will convene an ad hoc meeting at an appropriate time on the production and marketing of products of specific interest to Mediterranean forestry, including cork and resin, and other such meetings, as the need is identified. All activities under this project will be carried out in co-operation with the FAO European Forestry Commission.

**Duration:** To be decided.

**SUB-PROGRAMME 14.2: CURRENT FOREST PRODUCTS MARKET DEVELOPMENTS AND SHORT-TERM PROSPECTS, INCLUDING 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, consumption 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.

**Work accomplished and to be undertaken:** The annual session of the Timber Committee reviews short-term trends and prospects in the production, trade and consumption of coniferous and non-coniferous (including tropical) logs and sawnwood, wood-based panels and pulpwood, on the basis of estimates and other market information prepared by delegations for the year in progress and the forthcoming year. An analysis of market trends, based on the Committee's discussions is published after the session, as well as an Annual Forest Products Market Review based on data supplied by governments in connexion with project 14.6.1.

**Duration:** Continuing.

14.2.2. **Standardization in the forest products sector**

14.2.2.1. **Review of standardization activities**

**Description:** The Committee will keep under review needs and priorities for standardization in the field of forest products as well as progress in its own standardization project (14.2.2.2.). On the basis of this review, it will decide what activities it should undertake, with a view to facilitating international trade in forest products by removing non-tariff barriers, and to furthering the rational and economic use of wood. The Committee will also keep under review work being undertaken by other organizations, notably ISO, on the reduction of the number of standard dimensions entering international trade, with a view to co-operating in such work as and when it considers it appropriate.

**Work to be undertaken:** The Timber Committee will review all its standardization activities, when it considers this appropriate in the light of developments, notably progress on project 14.2.2.2. It will also maintain co-operation with ISO and its appropriate technical committees.

**Duration:** Continuing.
14.2.2.2. Standardization of stress grading and finger-jointing of coniferous sawn timber

Description: The Committee will encourage the incorporation of the provisions of the revised ECE Recommended Standards on stress grading of coniferous sawn timber and on finger-jointing in structural coniferous sawn timber into national standards, and undertake further work to extend their international acceptability and application with a view to ensuring the rational and economic use of, and to facilitating trade in, coniferous sawn timber.

Work accomplished: The team of specialists on stress grading and finger-jointing of coniferous sawn timber met in 1984. It agreed on an amendment in the ECE Recommended Standard on stress grading to submit to the Committee for approval and on proposals for further work.

Work to be undertaken: The lists of national "contact points" that will receive the approval forms intended to facilitate trade in stress graded and finger-jointed coniferous sawn timber and of country correspondents to help monitor the implementation of the ECE Recommended Standards will be completed and kept up to date. An ad hoc meeting will be held in 1985 to consider revisions to the Recommended Standards and progress achieved in incorporating their provisions in national standards, and to draw up proposals for future activities including, as appropriate, co-operation with ISO.

Duration: 2 years ending in 1986.

14.2.2.3. Problems of classification and definitions

Description: The Joint FAO/ECE Working Party on Forest Economics and Statistics, in co-operation with the Conference of European Statisticians, will keep under review and co-operate in the work of harmonizing multi-sector classifications and definitions (e.g. the CCC Harmonized System, ICGS, SITC, ISIC), with a view to ensuring that it follows developments in technology and in industrial and trade practice, and that the appearance of new products and changes in organizational structures are taken into account.

Work accomplished: The Working Party's fourteenth session reviewed proposals for the revision of the parts of the United Nation's International Standard Industrial Classification of all Economic Activities (ISIC) relating to forestry and the forest industries.

Work to be undertaken: A draft proposal for revision of ISIC will be circulated to governments and, on the basis of their comments, a final proposal will be forwarded to the Conference of European Statisticians and other appropriate United Nations bodies. Suggestions will be drafted under the leadership of the Finnish Forest Research Institute on the possible revision of the ILO ISCO for consideration at the fifteenth session.

Duration: 2 years ending 1985.
This sub-programme is covered by the activities of the Joint FAO/ECE/ILO Committee on Forest Working Techniques and Training of Forest Workers, which normally meets biennially (1986, 1988, etc.), with meetings of its Steering Committee in the intervening years. Its task is to foster international collaboration on technical, economic and organizational aspects of forest working techniques and training of forest workers in logging and forest operations; special attention is given to increasing the efficiency of labour, the reduction of the physical efforts of the worker, prevention of accidents, reduction of waste and the establishment of an adequate balance between technical, social and economic requirements and protection of the environment.

14.3.1. Silvicultural operations and general management aspects

14.3.1.1. Development and use of machinery and methods for stand establishment, including planting stock and equipment

Description: The Joint Committee will promote the exchange of information and further rational regeneration methods which do not damage the forest ecosystem, by regularly reviewing machines, techniques and planting stock applied in afforestation and reforestation, with emphasis on site clearing, soil preparation and planting.

Work accomplished: A seminar on machines and techniques for plant production was held in 1983 in Czechoslovakia in collaboration with IUFRO.

Work to be undertaken: (a) A seminar will be held in the Federal Republic of Germany (subject to confirmation) in 1987 on the impact of acute forest damage on harvesting and silvicultural operations;

(b) the seventh session of the Steering Committee in 1985 will make proposals for the setting up of a team of specialists to draw up a programme for a seminar in 1988 on artificial and natural reforestation methods after harvesting.

Duration: (a) 3 years ending in 1987; (b) 3 years ending in 1988.

14.3.1.2. Forest fire prevention and control

Description: The Joint Committee will examine techniques and equipment used in forest fire control, as well as preventive measures, with a view to assisting governments in these fields.

Work accomplished: The team of specialists met in 1983 and drew up proposals for the scope and programme for a seminar on methods and equipment for the prevention of forest fires to be held in Portugal in 1985 and the role the team should play in its preparation. An enquiry was circulated to collect information on the basis of which the team will prepare basic papers on the main topics of the seminar.

Work to be undertaken: A seminar on methods and equipment for the prevention of forest fires will be held in Portugal in 1985 in collaboration with IUFRO. The team of specialists will be actively involved in the preparation of the seminar. For certain activities, e.g. forest fire statistics, the team will work in collaboration with the Joint FAO/ECE Working Party on Forest Economics and Statistics (project 14.6.2.4.).

Duration: 1 year ending in 1985.
14.3.1.3. Methods and procedures for the preparation and implementation of working forest management plans

Description: The Joint Committee will survey practical methods and procedures for the preparation and implementation of working forest management plans, with special emphasis on the determination, collection and processing of relevant data with a view to assisting forest managers in the execution of their tasks.

Work to be carried out: A seminar will be organized in 1986 in the Netherlands on the preparation and implementation of forest management plans, in conjunction with the sixteenth session of the Joint Committee.

Duration: 3 years ending in 1986.

14.3.1.4. Development of methods and equipment for silvicultural operations and multiple use forestry under Mediterranean conditions

Description: The Joint Committee will promote the exchange of information and further the development of methods and techniques applicable to silvicultural operations and multiple use forestry under the particular conditions found in countries in the Mediterranean area, with a view to assisting the countries concerned in these fields.

Work accomplished: A team of specialists submitted a progress report on afforestation methods and equipment to the fifteenth session of the Joint Committee in May 1984. A seminar was held in Turkey in May 1984 on the rehabilitation of low-productivity forests.

Work to be undertaken: (a) The team of specialists will submit the final version of its report to the sixteenth session of the Joint Committee, which will decide on what further action should be taken;

(b) the proceedings of the seminar on the rehabilitation of low-productivity forests will be published.

Duration: 2 years ending in 1986.

14.3.1.5. Standardization activities in the field of forestry, including standardization of concepts and terms used by the Joint Committee

Description: The Joint Committee will keep under review standardization activities in the field of forestry, notably for forest machinery, with a view to assisting countries in the development, and safety in use, of equipment and methods; and will establish definitions of currently used technical and economic concepts and terms, in order to facilitate exchange of information during meetings and on other occasions.

Work accomplished and to be undertaken: (a) The Joint Committee keeps close contact with ISO technical committees relevant to its work; and reviews, at each of its sessions, ISO standardization activities carried out over the past 2 years;

(b) the host country of seminars and authors of basic papers are invited, as and when appropriate, to prepare short lists of basic terms and concepts. These are reviewed by an informal group established during the seminar, and a revised glossary in the three working languages is subsequently prepared after the seminar, for incorporation in the proceedings.

Duration: Continuing.
14.3.2. Wood harvesting and transport

14.3.2.1. Development and use of logging machinery

Description: The Joint Committee will keep under review trends and prospects in the development and use of logging machinery, taking into account specific conditions and cost/price relationships so as to encourage rational logging methods in flat, hilly and mountainous regions from the economic, ergonomic and environmental points of view.

Work accomplished: A seminar on reducing forest biomass losses in logging operations was held in December 1982 in the USSR. A seminar on silvicultural, technological, economic and other problems connected with the mechanization of thinning operations was held in September 1983 in the German Democratic Republic. A special discussion on the use of different types of aircraft in forest operations was held at the fifteenth session of the Joint Committee.

Work to be undertaken: (a) Seminars on selected items will be held at intervals: in 1985 in the USSR, on mechanization of logging operations in mountainous regions; and in 1986 in Sweden (subject to confirmation) on small-scale logging machines. The provisional programme for the latter seminar will be submitted to the seventh session of the Steering Committee;

(b) the Steering Committee at its seventh session will discuss and decide on possible follow-up to the special discussion at the fifteenth session on the use of aircraft in forest operations.

Duration: (a) Continuing; (b) to be decided by the Steering Committee at its seventh session.

14.3.2.2. Forest roads and transport of wood raw material

Description: The Joint Committee will promote the exchange of information on methods of construction of forest roads and on the transport by road or other means of wood raw material, with a view to assisting countries to rationalize their transport systems and reduce costs.

Work to be undertaken: A study tour on methods and techniques of forest road construction will be held (subject to confirmation) in France, the Federal Republic of Germany and Switzerland in 1988.

Duration: 1 year ending in 1988.

14.3.2.3. Terrain classification from the wood harvesting point of view

Description: The Joint Committee will review studies on terrain classification and forest accessibility, with a view to facilitating international comparisons on accessibility of forest resources.

Work accomplished: A team of specialists continued its work on a descriptive terrain classification for forestry.

Work to be undertaken: The report of the team of specialists will be circulated to member countries for comments and testing, and for comment also to IUFRO and other international bodies concerned. The seventh session of the Steering Committee will decide whether further work should be undertaken in this field.

Duration: 2 years ending in 1986.
14.3.2.4. Compatibility of harvesting methods and equipment with silviculture and the environment

Description: The Joint Committee will review harvesting methods and equipment and compare these with the methods applied in silviculture so as to determine compatibilities and incompatibilities, taking into account environmental aspects.

Work accomplished: A team of specialists submitted a progress report on its work on the project to the fifteenth session of the Joint Committee in 1984.

Work to be undertaken: (a) The final report of the team of specialists will be submitted to the seminar on mechanization of logging operations in mountainous regions in the USSR in 1985 (project 14.3.2.1.); (b) two special studies prepared in France on questions related to this project will be circulated to member countries for information.

Duration: 1 year ending in 1985.

14.3.2.5. Harvesting of wood for energy purposes

Description: The Joint Committee will review methods and equipment suitable for the production and harvesting of wood specifically destined for energy production, so as to determine the potential of the forest or special plantations to contribute economically to total energy supply.

Work accomplished and to be undertaken: A report will be presented to each session of the Joint Committee on activities in the field of wood harvesting for energy purposes being undertaken by other international organizations, notably the International Energy Agency and the FAO Cooperative Research Network on Rural Energy.

Duration: Continuing.

14.3.3. Vocational training, applied ergonomics, occupational safety and health

14.3.3.1. General questions of vocational training in forestry

Description: By keeping under review developments and trends in vocational training in forestry, the Joint Committee will assist governments in planning their national vocational training policies and raising the efficiency of forest operations and in improving working practices with regard to safety and health.

Work to be undertaken: (a) A workshop on extension education and technical services to private forest landowners will be organized in 1985 by the Government of the United States, with the collaboration of the Joint Committee; (b) a team of specialists on vocational training and extension services for small-scale forest owners will collaborate in the preparation of the above workshop; (c) the seventh session of the Steering Committee will discuss possibilities for organizing a seminar on vocational training in 1988.

Duration: (a) and (b) 1 year ending in 1985; (c) 3 years ending in 1988.

14.3.3.2. Specific problems of vocational training in forestry

Description: The Joint Committee will provide governments with guidance in connexion with their services dealing with specific problems of vocational training.

Work to be undertaken: The seventh session of the Steering Committee in 1985 will consider what further activities could be undertaken in this field and submit proposals to the Joint Committee.

Duration: 2 years ending in 1986.
14.3.3.3. **General questions of applied ergonomics, safety and health in forest operations**

*Description:* The Joint Committee will help governments in their national health and employment planning by keeping under review developments and trends in ergonomics applied to forestry, occupational safety and health, with a view to promoting safer working habits, preventing occupational injuries and diseases, increasing work performance and forest workers' satisfaction with their job.

*Work accomplished:* A seminar on ergonomics applied to forestry was organized by the Government of Austria in October 1983, in collaboration with the Joint Committee and IUFRO.

*Work to be undertaken:* (a) A seminar on occupational health and rehabilitation of forest workers will be held in Finland in 1985;  
(b) the seventh session of the Steering Committee will discuss possibilities for organizing a seminar related to applied ergonomics in forestry operations in 1987.

*Duration:* (a) 1 year ending in 1985; (b) 2 years ending in 1987.

14.3.3.4. **Specific problems of applied ergonomics, safety and health in forest operations**

*Description:* The Joint Committee will study specific problems related to ergonomics, safety and health in forest operations with a view to improving working methods and recommending safety standards in various operations.

*Work accomplished:* A number of countries nominated specialists for a team on chemicals in forestry.

*Work to be undertaken:* The seventh session of the Steering Committee will discuss, on the basis of a report by the subject area coordinator, what activities could be undertaken on the question of chemicals in forestry: health hazards and protection, and submit its recommendations to the sixteenth session of the Joint Committee.

*Duration:* 1 year ending in 1986.

14.3.3.5. **Transfer of technical information and experience**

*Description:* The Joint Committee will promote the transfer of technical information and experience by the countries of the ECE region to those in other regions, with a view to assisting the latter to develop their forestry capabilities.

*Work accomplished and to be undertaken:* (a) Wherever possible, the proceedings of Joint Committee seminars will be published by the host country or by other means;  
(b) wherever possible, host countries of Joint Committee seminars will offer fellowships to assist participants from developing countries to attend the seminars of special interest for them;  
(c) the preliminary results of the enquiry on the transfer of experience, information and know-how from the ECE region to other regions, which was presented to the fifteenth session, will be up-dated and completed, with the inclusion also of information on teaching aids and training materials, and submitted to the sixteenth session;  
(d) a study tour and seminar will be held in Austria, the Federal Republic of Germany and Switzerland (subject to confirmation) in 1986 on the transfer of simple technology in forestry from the ECE region to other regions.

*Duration:* (a) and (b): continuing; (c) and (d): 2 years ending in 1986.
SUB-PROGRAMME 14.4: ECONOMIC, TECHNOLOGICAL AND MANAGERIAL ISSUES FOR THE WOOD-WORKING INDUSTRIES

14.4.1 Development and introduction of new technologies in the wood-working industries, including furniture

Description: The Committee will further the exchange of information and experience on technological developments in the wood-working industries including the use of process- and quality-control equipment (electronics, robotics, lasers, etc.), with a view to helping countries to improve efficiency in the production of forest products, including furniture, to the benefit of the national economy and of the users of those products.

Work to be undertaken: Countries will be invited to nominate members of a team of specialists on the furniture industry. When constituted, the team should draw up proposals for the Committee's activities in the field of furniture, in particular the scope and programme of the seminar on the furniture industry, proposed for 1987 or 1988.

Duration: 4 years ending in 1988

14.4.2 Development of new products, markets and applications for forest products

Description: The Committee will further the exchange of information and experience on new products, markets and applications for forest products, with a view to helping countries to improve efficiency in the use of raw materials and products, and provide technologically and economically better products to the consumer.

Work to be undertaken: At their meeting in spring 1985 the office-holders will consider proposals prepared by the countries concerned, in co-operation with the secretariat, concerning the following activities:

- the use of forest products, notably lower quality hardwoods, in agricultural constructions;
- seminar on the matching of end-users' quality and specification requirements for lower quality hardwoods with growers' and converters' supply possibilities.

Duration: To be decided by forty-third session.

14.4.3 Energy conservation and self-sufficiency in the mechanical wood-processing industries

Description: The Committee will encourage the exchange of information in this field, with a view to furthering the conservation of energy and, where appropriate, the increase of energy self-sufficiency in the mechanical wood-processing industries.

Work accomplished: A team of specialists held its inaugural meeting in 1984 at which it drew up proposals for the scope and type of activities to be undertaken for consideration by the forty-second session of the Committee.

Work to be undertaken: A second meeting of the team will be held in 1985 to consider the drafts of studies prepared by members of the team and to make proposals for further activities.

Duration: 2 years ending in 1985.
14.4.4. **Management techniques in the wood-working industries**

**Description:** The Committee will assist countries to introduce improved management techniques in the wood-working industries, with a view to raising efficiency and productivity through improved performance at the senior and middle-management levels.

**Work to be undertaken:** Countries will be invited to provide information on the availability of education and training, both practical and theoretical, to management staff in the sawmilling industry. A report will be submitted to the forty-third session which will decide on further action.

**Duration:** To be decided by forty-third session.

**SUB-PROGRAMME 14.5: ENVIRONMENTAL AND RESOURCE CONSERVATION ISSUES**

(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).

14.5.1. **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.

**Work accomplished:** The preliminary results of the enquiry on the role of the forest in supplying environmental and other non-wood goods and services were considered by the Working Party's fourteenth session.

**Work to be undertaken:** After the preliminary results have been circulated to country correspondents for further comment and additional information, and revision by the secretariat with the assistance of a consultant, they will be finalized for inclusion in the supplement of the *Timber Bulletin for Europe* containing the results of the forest resource assessment (see also project 14.6.2.3.). The Working Party's fifteenth session will review the results of this project, which will also be used in the study of long-term timber trends and prospects (project 14.1.1.1.).

**Duration:** 2 years ending in 1985.

14.5.2. **Rational use of wood biomass and the reduction of losses**

**Description:** The Committee will further the exchange of information and experience on the rational use of wood biomass and the reduction of losses, with a view to helping countries to optimize the use of available wood resources, including forest and industry residues and reduce losses, thereby contributing to the conservation of the forest resource. The project will include the use of wood as a feedstock for the production of chemicals.

**Work to be undertaken:** A seminar on a topic to be decided will be organized in 1988 or 1989.

**Duration:** 5 years ending 1989.
14.5.3. Implications of air pollution damage to forests for the forestry and forest products sector

**Description:** The Committee will examine the implications of air pollution damage to forests for the forestry and forest products sector, taking into account the work being carried out by other competent bodies, notably the Executive Body for the Convention on Long Range Transboundary Air Pollution, the FAO European Forestry Commission, the European Economic Community and IUFRO.

**Work accomplished:** A report on the implications of air pollution damage to forests for the forestry and forest products sector was prepared for submission to the forty-second session of the Committee.

**Work to be undertaken:** A team of specialists will be constituted to review the situation on the basis of information available, including that supplied by countries in response to the Committee's invitation, and to make recommendations for future work by the Committee, the team itself or other bodies. The team will report to the Committee's forty-third session which will decide on future action.

**Duration:** To be decided by forty-third session.

14.5.4. Measures to be taken in the event of sudden and severe damage to forests

**Description:** The Committee will assist ECE countries faced by sudden and severe damage to their forests, notably that caused by fire, windblow, snow, and insect infestation, by bringing together accounts of relevant experience in other countries and a list of institutions which might be able to provide help and advice. In addition, it will promote the rapid international dissemination of reliable information on these events, in order to reduce disruption of roundwood markets.

**Work accomplished:** A draft guideline for the submission of information on cases of sudden and severe damage to forests was circulated to countries. Countries were invited to provide the addresses to which such information should be forwarded, as well as relevant publications and the names of institutions that might be able to help in case of need in another country.

**Work to be undertaken:** Countries which have not already done so will be invited to transmit to the secretariat the lists of publications concerning measures to deal with sudden and severe damage to forests, of the names of institutions that might be able to help in case of need and of addresses to which information on such damage should be sent. Countries which experience such damage, should send information on the damage to the secretariat, using the outline in TIM.R.101 ANNEX IV, especially when the damage is expected to have a significant impact on the forest products market. The secretariat will circulate this information to the addresses provided by countries. The Committee will review progress at its forty-third session.

**Duration:** Continuing.
14.6.1. Publication of the 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.

Work accomplished and to be undertaken: The secretariat publishes two issues a year of the Timber Bulletin for Europe, containing annual and quarterly statistics on production, trade and prices of forest products, collected from governments by means of quarterly questionnaires, and a supplement, four times a year, of monthly prices of forest products and related data. Country forest and forest products profiles are prepared by the secretariat in collaboration with the governments of the countries concerned, and published.

Duration: Continuing.

14.6.2. Selected problems of economics and statistics of forestry and forest products

This programme element, together with programme elements 14.6.3. and 14.6.4., is carried out by the Joint FAO/ECE Working Party on Forest Economics and Statistics which normally meets biennially (1985, 1987, etc.). It co-operates with the Conference of European Statisticians.

14.6.2.1. Organization and periodicity of statistical data collection and dissemination

Description: The Working Party will review periodically the Committee's programme for the collection and dissemination of statistical data, to ensure that it corresponds with the needs of governments.

Work accomplished and to be undertaken: The Working Party formulates proposals for improving the Committee's programme of collection and dissemination of statistical data, with regard to its organization, method of collection, periodicity, and the improvement of the accuracy and comparability of data obtained from and used by governments. Countries will review the procedures for filling in and returning the FAO/ECE Forest Products Questionnaires with a view to improving, where necessary, the punctuality and completeness of their replies.

Duration: Continuing.

14.6.2.2. Conversion factors

Description: The Working Party will review the conversion factors (raw material input/product output) 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.

Work to be undertaken: The Working Party will continue to review at four-yearly intervals (the next in 1985) conversion factors communicated by governments in reply to a questionnaire.

Duration: Continuing.
14.6.2.3. **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.

**Work accomplished:** A pilot study on labour productivity in forestry in selected countries was prepared by the Finnish Forest Research Institute and presented to the fourteenth session of the Working Party.

**Work to be undertaken:** Countries will be invited to provide data on labour productivity to complement those contained in the pilot study. Work on completing the study will be co-ordinated by the Finnish Forest Research Institute and published.

**Duration:** 1 year ending in 1984.

14.6.2.4. **Forest fire statistics**

**Description:** The Working Party will seek to improve the exchange of information on forest fires, their causes and methods of prevention and protection and the costs involved.

**Work accomplished and to be undertaken:** Biennial enquiries are circulated and the results published after review by the Working Party. A team of specialists will formulate guidelines for the estimation of losses from forest fires. Enquiries will be undertaken at 2-year intervals, the next in 1985. A pilot study on damage to forests from causes in addition to forest fire will be prepared and circulated to countries with an invitation to prepare similar studies. The fifteenth session of the Working Party will consider further activities in the light of experience gained.

**Duration:** Continuing.

14.6.2.5. **Application of remote sensing and other new survey technology for forest management and planning**

**Description:** The Working Party will review developments in remote sensing and other new survey technology with a view to determining their applicability to forest management and planning and the possibilities for adapting management and planning methods to make the best use of such technologies.

**Work to be undertaken:** A seminar on the practical application of remote sensing in forestry will be held in Sweden in 1985.

**Duration:** 2 years ending in 1985.

14.6.2.6. **Economic aspects of the fuller use of forest biomass**

**Description:** The Working Party will study the economic aspects of the fuller use of the forest biomass with a view to determining the potential for the forest resource to meet the demand for raw material from the different wood-using industries and consumption sectors.

**Work accomplished:** A revised report was submitted by the delegation of the USSR to the fourteenth session.

**Work to be undertaken:** The report submitted to the fourteenth session will be revised by USSR experts in the light of comments submitted by countries. Countries will be invited to provide information on the potential availability and use of forest residues and those from the wood-working industries.

**Duration:** 2 years ending in 1985.
14.6.2.7. Economic aspects of afforestation and reforestation

**Description:** The Working Party will study the economic aspects of afforestation and reforestation with the object of comparing the efficiency of different methods and the relative costs and returns in different countries under different conditions.

**Work accomplished:** A report presented by the delegation of the United Kingdom was considered by the Working Party's fourteenth session.

**Work to be undertaken:** Countries will be invited to provide information on the costs of afforestation and reforestation and the return on investment. A report will be prepared under the leadership of the United Kingdom for the fifteenth session.

**Duration:** 2 years ending in 1985.

14.6.2.8. Economic aspects of the introduction of new forest machines and equipment

**Description:** The Working Party will study the economic aspects of the introduction of new forest machines and equipment with the object of assessing their productivity and return on investment in different countries and under different operating conditions.

**Work to be undertaken:** Under the leadership of the USSR, further sources of information will be explored for incorporation in the revision of the report prepared for the fourteenth session, including material generated by the Joint FAO/ECE/ILO Committee on Forest Working Techniques and Training of Forest Workers.

**Duration:** 2 years ending in 1985.

14.6.3 Forest resource analysis

**Description:** The Working Party will review methods of forest inventory used by governments and by the secretariat to ensure that all parameters relevant to measuring actual productive potential of the forest, as well as parameters measuring change, both for wood and non-wood benefits, are taken into account and that the methods adopted correspond as closely as possible to the needs of all users.

**Work accomplished:** Preliminary results of an enquiry on data relating to the general forest inventory and to forest biomass were considered by the fourteenth session of the Working Party, in conjunction with project 14.5.1.

**Work to be undertaken:** After the preliminary results of Part I (general inventory data) and Part II (forest biomass) have been circulated to country correspondents for checking, revising and completing, the secretariat will prepare a final version for publication. The Working Party will review the results of this project at its fifteenth session.

**Duration:** 2 years ending in 1985.
14.6.4. Transfer of economic and statistical methods and experience in the forest and forest products sector

Description: The Working Party will contribute to the building up of statistical services in countries inside and outside the ECE region through the transfer of know-how and experience in methods of data collection, assembly and dissemination in the forest and forest products sector.

Work accomplished and to be undertaken: Participation of countries of other regions is encouraged, particularly at Working Party meetings with subject matter relevant to their interests. Member countries of the Working Party's parent bodies are invited to support such participation through provision of fellowships, where feasible. Publication of results of the relevant parts of the Working Party's output is promoted to make them readily available to countries of other regions. Under the leadership of Norway, a description of standard practices in forest statistics production in the Nordic countries is to be completed, taking account of suggestions made by the Working Party, and published before the fifteenth session so as to be available to member countries and developing countries. An informal list of country correspondents from other regions will be maintained to provide contact with the FAO Forestry Department (Analysis and Trade Group) on forestry economics and statistical questions.

Duration: Continuing.
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<tr>
<td><strong>SUB-PROGRAMME 14.1: MEDIUM- AND LONG-TERM TRENDS, PROSPECTS AND POLICIES FOR FOREST PRODUCTS</strong></td>
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<tr>
<td>14.1.1. Appraisal of medium- and long-term timber trends and prospects</td>
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<tr>
<td>14.1.1.1. Appraisal of long-term timber trends and prospects</td>
<td>Preparation of draft study, review by ad hoc meeting (1985), jointly with FAO European Forestry Commission, revision and publication (1986)</td>
<td>Joint Timber Committee/FAO European Forestry Commission session to discuss policy implications of the study</td>
<td>Further activities as decided by Committee</td>
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<tr>
<td>14.1.1.2. Medium-term trends in the markets for specific forest products</td>
<td>Wood-based panels</td>
<td>Sawwood and sawlogs</td>
<td>Plywood, wood for energy and miscellaneous roundwood</td>
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<tr>
<td>14.1.2. Medium-term trends in the structure and capacity of wood-processing industries</td>
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<tr>
<td>14.1.2.1. The wood-based panels industries</td>
<td>Survey of the wood-based panels industries</td>
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<tr>
<td>14.1.2.2. The sawmilling industry</td>
<td>Publication of the results of the survey on the sawmilling industry</td>
<td>Discussion of further activities by FAO/ECB Working Party</td>
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<td>14.1.3. Trends, prospects and policies in southern Europe</td>
<td>Ad hoc meeting on the production and marketing of products of specific interest to Mediterranean forestry (year and host country to be decided)</td>
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<tr>
<td><strong>SUB-PROGRAMME 14.2: CURRENT FOREST PRODUCTS</strong></td>
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<tr>
<td>14.2.1. Review of production, trade, consumption and prices of forest products</td>
<td>Continuing</td>
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<tr>
<td>14.2.2. Standardization in the forest products sector</td>
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<tr>
<td>14.2.2.1. Review of standardization activities</td>
<td>Continuing; co-operation maintained with ISO and its appropriate Technical Committees</td>
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<tr>
<td>14.2.2.2. Standardization of stress grading and finger-jointing of coniferous sawn timber</td>
<td>Ad hoc meeting</td>
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<tr>
<td>14.2.2.3. Problems of classification and definitions</td>
<td>Submission of proposals on relevant parts of ISO ISCO to fifteenth session of Joint FAO/ECB Working Party on Forest Economics and Statistics; proposal for revision of relevant parts of ISIC to be forwarded to Conference of European Statisticians and other appropriate bodies</td>
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### Tabular Presentation of Timber Committee Programme of Work for 1985-1989 (Cont.)

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<tr>
<td><strong>SUB-PROGRAMME 14.3: FOREST WORKING TECHNIQUES AND TRAINING OF FOREST WORKERS</strong> (Activities of the Joint FAO/UNESCO Committee on Forest Working Techniques and Training of Forest Workers)</td>
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<tr>
<td>14.3.1</td>
<td>Silvicultural operations and general management aspects</td>
<td>Seventh session of Steering Committee</td>
<td>Sixteenth session in the Netherlands</td>
<td>Eighth session of Steering Committee</td>
<td>Seventeenth session in Steering Committee</td>
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<tr>
<td>14.3.1.1</td>
<td>Development and use of machinery and methods for stand establishment, including planting stock and equipment</td>
<td>Seminar in Federal Republic of Germany (subject to confirmation) on the impact of acute forest damage on harvesting and silvicultural operations</td>
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<td>Seminar in ..........</td>
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<tr>
<td>14.3.1.2</td>
<td>Forest fire prevention and control</td>
<td>Seminar in Portugal on methods and equipment for the prevention of forest fires</td>
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<tr>
<td>14.3.1.3</td>
<td>Methods and procedures for the preparation and implementation of working forest management plans</td>
<td>Seminar in the Netherlands on the preparation and implementation of forest management plans</td>
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<tr>
<td>14.3.1.4</td>
<td>Development of methods and equipment for silvicultural operations and multiple use forestry under Mediterranean conditions</td>
<td>Submission of completed study on afforestation methods and equipment under Mediterranean conditions to sixteenth session</td>
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<tr>
<td>14.3.1.5</td>
<td>Standardisation activities in the field of forestry, including standardization of concepts and terms used by the Joint Committee</td>
<td>Review by Joint Committee on basis of report from ISO</td>
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Terms and definitions to be prepared in connection with seminars and reviews by informal group during the seminar for inclusion in the proceedings.

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<tr>
<td>14.3.2. Wood harvesting and transport</td>
<td></td>
<td></td>
<td>Seminar in Sweden (subject to confirmation) on small-scale logging machines</td>
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<td>Seminar in ............... 1/ on ...............</td>
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<tr>
<td>14.3.2.1. Development and use of logging machinery</td>
<td>Seminar in USSR on mechanization of logging operations in mountainous regions</td>
<td></td>
<td>(see 14.3.1.1 above)</td>
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<tr>
<td>14.3.2.2. Forest roads and transport of wood raw material</td>
<td></td>
<td></td>
<td>Study tour in France, Federal Republic of Germany and Switzerland (subject to confirmation) on methods and techniques of forest road construction</td>
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<tr>
<td>14.3.2.3. Terrain classification from the wood harvesting point of view</td>
<td>Report by team of specialists to be circulated to member countries for comments and testing, and for comment also to IUFRO and other international bodies concerned</td>
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<tr>
<td>14.3.2.4. Compatibility of harvesting methods and equipment with silviculture and the environment</td>
<td>Submission by team of specialists of the final report to Seminar on mechanization of logging operations in mountainous regions</td>
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<tr>
<td>14.3.2.5. Harvesting of wood for energy purposes</td>
<td>Report on new developments to each session of the Joint Committee</td>
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<tr>
<td>14.3.3. Vocational training, applied ergonomics, occupational safety and health</td>
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<td>Seminar in .......... 1/ on vocational training in forestry</td>
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<tr>
<td>14.3.3.1. General questions of vocational training in forestry</td>
<td>Collaboration of team of specialists in workshop in USA on extension education and technical services for private forest owners</td>
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<tr>
<td>14.3.3.2. Specific problems of vocational training in forestry</td>
<td>Steering Committee to discuss proposals for future activities</td>
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<tr>
<td>14.3.3.3. General questions of applied ergonomics, safety and health in forest operations</td>
<td>Seminar in Finland on occupational health and rehabilitation of forest workers</td>
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<td>Seminar in .......... 1/ on applied ergonomics in forest operations</td>
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<tr>
<td>14.3.3.4. Specific problems of applied ergonomics, safety and health in forest operations</td>
<td>Steering Committee to discuss proposals for future activities on the question of chemicals in forestry: health hazards and protection.</td>
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<tr>
<td>14.3.3.5. Transfer of technical information and experience</td>
<td>Enquiry on transfer of experience, information and know-how to be updated and submitted to sixteenth session of Joint Committee</td>
<td></td>
<td>Study tour and seminar in Austria, Federal Republic of Germany and Switzerland (subject to confirmation) on the transfer of simple technology from the EEC region to other regions</td>
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<tr>
<td><strong>SUB-PROGRAMME 14.4.: ECONOMIC, TECHNOLOGICAL AND MANAGERIAL ISSUES FOR THE WOOD-WORKING INDUSTRIES</strong></td>
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<tr>
<td>14.4.1. Development and introduction of new technologies in the wood-working industries, including furniture</td>
<td>Nomination of members of team of specialists on furniture industry</td>
<td></td>
<td>Seminar in ... (^1) on the furniture industry (or in 1988)</td>
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<tr>
<td>14.4.2. Development of new products, markets and applications for forest products</td>
<td>Office-holders to consider proposals: (1) Use of forest products, notably lower quality hardwoods, in agricultural constructions (2) Seminar on matching end-users' quality and specification requirements for lower quality hardwoods with growers' and converters' supply possibilities, possibly in the USA (Timing and scope of activities to be determined)</td>
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<td>14.4.3. Energy conservation and self-sufficiency in the mechanical wood-processing industries</td>
<td>Meeting of team of specialists to consider draft of studies prepared by its members and propose further activities</td>
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<tr>
<td>14.4.4. Management techniques in the wood-working industries</td>
<td>Report to the forty-third session on availability of management training in the sawmilling industry</td>
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<tr>
<td><strong>SUB-PROGRAMME 14.5.: ENVIRONMENTAL AND RESOURCE CONSERVATION ISSUES</strong></td>
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<tr>
<td>14.5.1. Quantification and evaluation of the environmental benefits of forests</td>
<td>Review of final results of enquiry by FAO/CEU Working Party on Forest Economics and Statistics</td>
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<td>Seminar in ... (^1) on a topic to be decided (or in 1989)</td>
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<td>14.5.2. Rational use of wood biomass and the reduction of losses</td>
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<td>14.5.3. Implications of air pollution damage to forests for the forestry and forest products sector</td>
<td>Constitution of team of specialists to report to forty-third session</td>
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<tr>
<td>14.5.4. Measures to be taken in the event of sudden and severe damage to forests</td>
<td>Collection of information. Review by forty-third session</td>
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<tr>
<td><strong>SUB-PROGRAMME 14.6.: FOREST AND FOREST PRODUCTS ECONOMICS AND STATISTICS</strong></td>
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<tr>
<td>14.6.1. Publication of the Timber Bulletin for Europe</td>
<td>Continuing (publication twice yearly of Bulletin and four times yearly of price supplement, preparation of country forest and forest products profiles)</td>
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<tr>
<td>14.6.2.2. Conversion factors</td>
<td>Four-yearly survey for review at fifteenth session and publication</td>
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<td>Four-yearly survey for review at seventeenth session and publication</td>
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<tr>
<td>14.6.2.3. Labour statistics</td>
<td>Review by Working Party of final results of study on labour productivity in forestry</td>
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<td>14.6.2.4. Forest fire statistics</td>
<td>Biennial survey for review at fifteenth session and publication</td>
<td>Biennial survey for review at sixteenth session and publication</td>
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<td>Biennial survey for review at seventeenth session and publication</td>
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<td>14.6.2.5. Application of remote sensing and other new survey technology for forest management and planning</td>
<td>Seminar on the practical application of remote sensing in forestry in Sweden</td>
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<td>14.6.2.6. Economic aspects of the fuller use of forest biomass</td>
<td>Revised report to be submitted to fifteenth session</td>
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<td>14.2.6.7. Economic aspects of afforestation and reforestation</td>
<td>Revised report to be submitted to fifteenth session</td>
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<tr>
<td>14.2.6.8. Economic aspects of the introduction of new forest machines and equipment</td>
<td>Further action to be decided by fifteenth session in light of additional information received</td>
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<td>Further activities to be decided by Working Party</td>
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<tr>
<td>14.6.3. Forest resource analysis</td>
<td>Review of final results of enquiry by fifteenth session</td>
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<tr>
<td>14.6.4. Transfer of economic and statistical methods and experience in the forest and forest products sector</td>
<td>Report on methods of forest statistics production in Nordic countries to be completed and published</td>
<td></td>
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<td>Working Party will keep under review possibilities for the transfer of economic and statistical methods in the forest and forest products sector</td>
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