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TIMBER COMMITTEE

REPORT OF THE FORTY-FIRST SESSION

held at Geneva from 10 to 14 October 1983

As approved by the Committee

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Introduction

1. The Timber Committee held its forty-first session at Geneva from 10 to 14 October 1983. 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; the Netherlands; Norway; Poland; Portugal; Romania; Spain; Sweden; Switzerland; Turkey; Ukrainian Soviet Socialist Republic; Union of Soviet Socialist Republics; United Kingdom of Great Britain and Northern Ireland; United States of America; Yugoslavia 1/.

2. A representative of the Ivory Coast participated under Article XI of the Commission's terms of reference.

3. The following United Nations and specialized agencies were represented: United Nations Conference on Trade and Development (UNCTAD); International Labour Organisation (ILO).

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

5. The following non-governmental organizations were represented: European Confederation of Agriculture (CEA); International Confederation of Free Trade Unions (ICFTU); the International Federation of Building and Wood Workers (IFBWW); the International Organization for Standardization (ISO); the International Technical Association for Tropical Timber (ATIBT); the International Union for the Conservation of Nature and Natural Resources (IUCN); the Organization of European Sawmilling Industries (OES); the World Wildlife Fund (WWF).

6. The Committee paid homage to the memory of Mr. François Merveilleux du Vignaux, delegate of France and past Chairman of the Timber Committee, and of Mr. Bernard Bittig, delegate of Switzerland.

Remarks by the Executive Secretary

7. The Executive Secretary, Mr. Klaus A. Sahlgren, drew attention to the practical and extensive activities undertaken by the Committee and the way in which it had adapted its programme over the years to changing needs and conditions. He pointed to the need for foresters and forest industries to take a long-term view of developments; hence, the importance being attached by so many countries to the timber trends study currently in hand. He noted that the Committee had included pulp and paper in its long-term analysis, and felt that ECE member countries would benefit if the Committee included these in other parts of its work programme.

8. The Executive Secretary also drew attention to the air pollution issue, on which ECE is playing a leading role through the Convention on Long-Range Transboundary Air Pollution, which entered into force in March 1983. The proposal that the Joint FAO/ECE Working Party on Forest Economics and Statistics should undertake evaluation work on the impact of air pollution on forests should form a natural link with more general activities being developed within the terms of the Convention. Other important aspects of the Committee's work included the use of wood as a source of energy; questions of concern to the countries of southern Europe, including forest fires; and the transfer of experience to other regions. He concluded by referring to the support given by governments to the Committee's activities, notably in the preparation of the timber trends study and by providing host country facilities for seminars and study tours.

1/ Further information about participation may be obtained from the secretariat: Timber Section, ECE/FAO Agriculture and Timber Division, Palais des Nations, 1211 Geneva 10.

Adoption of the Agenda (Item 1 of the Agenda)

9. The provisional agenda (ECE/TIM/22), presented by the secretariat, was adopted. The delegation of the USSR suggested that in future years one agenda item be devoted to a review of the Committee's work as a whole in the year preceding the session. The Committee requested the secretariat to take this suggestion into account when drawing up the provisional agenda for the forty-second session. It was also suggested that the original term "special lecture" was preferable to that of "special topic" which had been introduced for the forty-first session. It was agreed to discuss the latter suggestion under Item 9 of the agenda.

Election of officers (Item 2 of the Agenda)

10. The Committee re-elected Mr. A. Froncillo (Italy) Chairman and Mr. E. Nowicki (Poland) Vice-Chairman.

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

11. 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.86. 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)

12. The Committee was informed of the programme being carried out by the Forestry Department of FAO. Priority would be given to the potential of trees and forests to supply food, energy, income and employment in the rural community. This would be achieved through four technical programmes: forest resources and environment, forest industries and trade, forest investment and institutions and forestry for rural development. The Committee was also informed of the activities of the FAO Advisory Committee on Pulp and Paper, notably those aimed at the development of that industry in developing regions, and in carrying out the latest study on the outlook for pulp and paper. The Committee was further informed of the activities of the FAO European Forestry Commission, including the latter's work on air pollution damage to forests.

13. The representative of ILO informed the Committee of the establishment of the ILO Forestry and Wood Industries Committee, which would hold its first meeting in early autumn 1985. Preparatory work comprises the issue of two technical reports, which would cover the achievement of full employment in the woodworking industries and working, living and social conditions in the forestry sector.

14. The representative of UNCTAD informed the Committee of developments for tropical timber under the Integrated Programme for Commodities. The United Nations Conference on Tropical Timber in March 1983 had reached consensus on all but six of the 43 articles of an international agreement on the commodity. A second session of the Conference will be held from 7 to 18 November 1983 in Geneva to address those articles or parts of articles still pending.

15. The representative of ISO informed the Committee of recent developments in the field of international standardization relating in particular to ISO Work Area 14. Progress towards the publication of an International Standard for the structural use of timber in buildings (by ISO/TC 165) and International Standards for the determination of physical and mechanical properties of structural timber (by ISO/TCs 55 and 165) was reported. Attention was also drawn to the substantial programme of work of ISO/TC 23 "Tractors and machinery for agriculture and forestry": a programme of 25 future standards specifically for forestry machinery which stressed safety considerations, as well as the handbook of some 90 agricultural machinery standards newly published this year. The close liaison between ECE and ISO at Committee and secretariat levels is an important factor in the continuing co-operation on the harmonization of technical regulations and standards in the timber industries field and especially in the identification of priority subjects for standardization work.

16. The Committee was informed of the activities of the IFBWW, notably the annual meeting of the IFBWW Wood and Forestry Committee held in Geneva, a study tour in the Pacific Northwest of Canada and the United States and a conference organized by the IFBWW affiliate in the Federal Republic of Germany on the introduction of new technologies in the woodworking industries. In 1984 the IFBWW was planning a health and safety conference for wood, forestry and building workers.

17. The representative of the WWF informed the Committee of progress on the Tropical Forest Campaign. The Campaign aimed not only to raise funds but also to improve awareness on the importance of tropical forests. It appears that the campaign is meeting with a great success.

18. The Committee was also informed of the thirty-fifth General Assembly of CEA held recently at Wiesbaden. The Assembly adopted a resolution urging governments to pursue an active forest policy in order to prevent a decline in investments for the maintenance and protection of the forest, as well as for reforestation. It had also passed a resolution on the impact of air pollution on forests.

Joint FAO/ECE Working Party on Forest Economics and Statistics, fourteenth session, 13-17 June 1983: report (Item 5 of the Agenda)

19. The Committee was informed of the results of the Working Party's fourteenth session by the Working Party's Chairman, Mr. E. Clicheroux (Belgium). The Committee approved the Working Party's report (TIM/EFC/WP.2/12), including the programme of work.

20. The Committee noted with dismay that delays in the return of questionnaires to FAO/ECE continued: the situation even appeared to be deteriorating, possibly because statistical questions in general and the return of FAO/ECE questionnaires in particular may not be accorded sufficient priority by some member governments. It should be realized that the quality of the Committee's work was dependent to a large extent on the quality of the input by member governments, including the prompt return of questionnaires. In certain cases, there was also room for improvement in the quality and completeness of the data supplied. The Committee strongly urged all member governments to attach sufficient priority to completing and returning FAO/ECE questionnaires on time. It drew member governments' attention to the deadlines set by the Working Party for the various questionnaires, enquiries, requests for comments, etc., which were presented in the Working Party's report.

21. In accordance with the Working Party's proposals, the Committee requested that in their market statements to the Committee's forty-second session, countries should provide information on a trial basis on the following:

- production and trade of MDF (medium density fibreboard). The data would therefore have to be broken down into hardboard, insulating board, MDF and medium board (wet process). (The latter category, though not very important, was necessary to obtain a consistent total for fibreboard);
- data on wood preservation.

The Committee also supported the Working Party's suggestion to invite countries "to include in their market statements ... a general assessment of the stock situation for products for which they considered this to be of importance" and agreed that "during the market discussion reference to stocks should be encouraged whenever this appeared appropriate and useful". The circulation of the FAO/ECE questionnaire concerning stocks should be discontinued (TIM/EFC/WP.2/12, para. 58).

22. The Committee noted that no supplementary information to the reports on fuller use of the forest biomass and on the introduction of new forest machines and equipment had so far been received by Mr. Bourdin (USSR) (see TIM/EFC/WP.2/12, paras. 30-35). The delegation of the USSR stated, however, that Mr. Bourdin was willing to prepare revised versions of the studies if material were received from other countries.

Market developments in 1983 and prospects for 1984 (Item 6 of the Agenda)

23. 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 discussions, of the Annual Forest Products Market Review (Supplement 1 to Volume XXXVI of the Timber Bulletin for Europe), prepared by the secretariat, and of the brief comments by the secretariat on more recent developments (TIM/R.87/Add.1). It drew up tables of estimates for 1983 and 1984 of domestic requirements, production, imports and exports of sawn softwood, coniferous logs, hardwood logs and sawnwood (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 is presented in Annex I.

(a) General introduction

24. After three years of declining markets, some clear signs have appeared since the Committee's October 1982 session, that a recovery in the forest products sector in the ECE region is at last occurring. This generally reflects the development of the overall economy in the market economy countries in North America and parts of western Europe. The pattern of economic recovery has been very uneven, however: in North America, the strength of the rebound at least up to mid-1983 has taken some observers by surprise; in western Europe, there remains a noticeable contrast between those countries where an upturn has been apparent, even if it is not very robust, as in the Federal Republic of Germany, Sweden and the United Kingdom, and other countries where no improvement is yet visible.

25. Economic growth and particularly housebuilding, has spurred in North America, although there are indications, which are not entirely unwelcome, that the pace may be moderating to what is hoped will be a more sustainable rate. Interest rates are expected to remain close to the present high levels in the United States during 1984, which would be consistent with a policy to restrain a renewal of inflationary pressures, and this may prevent new housing starts rising much beyond the present annual rate of about 1.6 million units. This should allow the recovery in markets for forest products in 1983 to be further consolidated in 1984.

26. While unemployment levels have started to fall in the United States, the continued high levels in many western European countries, which are still increasing in some, are a matter of considerable concern, especially as they are partly the results of structural changes taking place in the economies and are thus unlikely to be markedly reduced in the event of a business recovery. This, together with stagnant or even falling real disposable incomes and continued cost of living increases, tends to put a dampening effect on recovery prospects. Those countries still facing serious problems of inflation and public sector and foreign trade deficits are also likely to continue restrictive public spending policies. The pattern of a gradual recovery so far seen in a few countries could be repeated over time elsewhere in the region.

27. The countries of eastern Europe have not, because of increasing interdependency through trade, been insulated from the economic developments in the market economy countries. After 1982, when growth of Net Material Product in most of them fell below that planned, targets for 1983 have been somewhat raised, but remain below the average growth planned for the 1981-85 period. Industrial output, however, is reported to have accelerated in the USSR during the first half of 1983.

28. While expectations, expressed at the Committee's October 1981 session of an improvement in economic conditions and markets in 1982 were not fulfilled, it noted that its outlook made in October 1982 for 1983 had proved quite accurate. It appears likely that the North American recovery in 1983 will continue in 1984. For western Europe, further slow growth can be expected in those countries already in the process of recovery, which may help others onto a similar path over the coming year or so. The constraints should not be underestimated, however, and consequently expectations should be kept modest.

29. For the forest products sector, parts of which are still burdened with over-capacity and poor profitability, the need to rationalize production and intensify marketing operations remains as strong as ever. Nevertheless, there is the prospect that this long-term process may be allowed to proceed under slightly more favourable economic conditions than those of the past few years.

(b) Sawn softwood and coniferous logs

30. For three consecutive years, between 1979 and 1982, apparent consumption of sawn softwood declined both in Europe and North America. In Europe the decline over those years amounted to 7 million m³ or 9% to reach a level of 77 million m³ in 1982. In North America, it was even more severe: a fall of 28 million m³ or 26% to a level of 77 million m³. In both regions, the drop in sawn softwood use was associated with the weakness of the national economies, but more specifically with the fall in housebuilding activity which was marked in many countries.

31. For 1983, both regions are expected to reverse the previous trend; however, the recovery is far stronger in North America than in Europe. Domestic requirements in North America are estimated to reach 94.6 million m³, or 22% more than in 1982; the corresponding estimate for Europe is 74.9 million m³, an increase of 3% over 1982. Increases in requirements in 1983 are forecast of over 700,000 m³ by the United Kingdom, of around half a million m³ by the Federal Republic of Germany, Poland and Turkey. To some extent, these increases reflect modest recoveries in real consumption, but with the upward trend of prices, there has also been an element of restocking at various stages of the supply pipeline. Most other European countries forecast little change in domestic requirements between 1982 and 1983; Italy, Belgium, Spain and Yugoslavia even expect further declines.

32. The recovery in production and exports in Europe is forecast to be appreciably stronger than in domestic requirements and imports. Production is estimated to rise to 71.9 million m³, or 3.8 million m³ (5 1/2%) more than in 1982; and exports to 22.8 million m³, or 1.7 million m³ (8%) more. Imports are estimated to reach 25.9 million m³, about 650,000 m³ (2 1/2%) higher than in 1982. For production, increases are foreseen in some exporting countries, notably Sweden, as well as importing countries with special situations, such as France where measures are being taken to convert substantial volumes of storm-felled timber, and the United Kingdom, where increasing quantities of sawlogs are becoming available from plantations. The United Kingdom, the Federal Republic of Germany and Denmark are forecasting appreciable growth in imports in 1983, which more than offsets declines expected in France, Italy and Belgium-Luxembourg.

33. For 1984, further small increases are forecast for Europe's domestic requirements and production of sawn softwood, of 800,000 m³ and 1 million m³ to 75.7 and 72.9 million m³ respectively. Exports are estimated to show a marginal increase to 23.0 million m³, and imports to fall by an equally small volume to 25.6 million m³. The changes in many countries in 1984 are seen as a consolidation of the market; no substantial increases in real consumption are foreseen. A marked slowing down is expected in North America, with an increase of 1.2 million m³ in domestic requirements between 1983 and 1984 comparing with the one of over 17 million m³ estimated for 1983.

34. After declining slowly from 1976 to 1981, USSR exports of sawn softwood recovered slightly in 1982 to 7.1 million m³. This upturn is estimated to continue in 1983 and 1984 to reach 7.5 million m³, with the increase planned to go to the socialist countries.

35. The volume of Europe's net imports (imports less exports) of sawn softwood in 1982 amounted to 4.1 million m³ and the estimates for 1984 give a figure of 2.5 million m³. This compares with 7.2 million m³ in 1979 and 8.3 million m³ in 1970. The steep decline that has been occurring recently in net imports reflects the success with which European exporters have developed markets outside the region, notably in North Africa and West Asia. On the other hand, there has not been a clear trend, either upward or downward, in Europe's total imports from other regions.

36. For coniferous logs, it is estimated that European production and domestic requirements will increase appreciably in 1983, domestic requirements reaching 126.5 million m³, or 5.5 million m³ (4 1/2%) more than in 1982. This increase, as well as the slower pace of growth in 1984, reflects the trend in sawn softwood production noted above. Over the two-year period, 1982 to 1984, the estimates for European imports and exports of coniferous logs show a downward tendency. Exports from Czechoslovakia are expected to decline steeply; otherwise no major changes are foreseen.

37. In the course of discussions, attention was drawn to the present low level of stock-holding of sawn softwood all along the supply pipeline in many European countries. Although high interest rates were the initial factor, certain technical developments in recent years, such as kiln-drying and packaging as well as in transport, such as roll-on/roll-off and improved road and rail communications, have greatly reduced the holding of large stocks in importing countries. Thus the burden of stock-holding has tended to shift towards the producers-exporters. Many of these have had low stock levels during 1983, especially in Sweden and Finland. Exporters need to improve the assortment composition of their stocks and their ability to meet their customers' demands with minimum delay.

38. The considerable increase in the price differential between North European redwood (pine) and whitewood (spruce/fir) over the past year or so is also causing some concern. With the differential in some countries being much greater for sawnwood than for logs, trading in whitewood was still unprofitable for many producers. This was particularly the case for Finland. There was a large measure of interchangeability possible between redwood and whitewood; nevertheless, traditions in use were slow to change, but more flexibility should be actively encouraged in the present circumstances to improve the balance between the two species groups.

39. Attention was drawn to the positive outlook for the dwelling construction sector in North America and several European countries, as well as the importance of the repairs and renovation sector as a market for sawn softwood. Attention needed to be paid, however, to the type of housing being built; more units constructed did not necessarily result in more sawnwood used. The increased building of "starter-homes" (one-bedroom units) in the United Kingdom was mentioned in this connexion.

40. It was reported that sales for 1984 delivery had already been made by some exporters at prices above those for 1983 delivery. After the strong price increases over the past year, especially for redwood, a warning note was sounded of growing consumer resistance in importing countries to further increases. For their part, several exporting country representatives stressed that there would be no need to exert any selling pressure on the market, given the situation regarding log availabilities, stock levels and selling opportunities in non-European markets.

41. All in all, the opening of the forward market, which was taking place earlier than for some years past, gave optimism for an active and well-balanced market in 1984, and a consolidation of the recovery that had been occurring in 1983.

(c) Hardwoods (temperate-zone and tropical)

42. The three-year decline in the sawn hardwood markets in Europe and North America since 1979 reached its low point in 1982 when consumption of sawn hardwood in Europe fell back to the average level of the 1970s and, in North America to far below it.

43. The economic recovery process in the United States since late 1982 led to a marked improvement in major sawn hardwood-using sectors, notably residential construction and furniture manufacture. This was reflected in strongly rising demand for sawn hardwood and rising prices for many assortments compared to 1982. Domestic requirements of sawn hardwood in 1983 in the United States are expected to rise by 1.4 million m³, or 13% to 12.3 million m³ and production even more strongly by 1.7 million m³ or 15% to 13.0 million m³. A similar rate of growth in requirements of sawn hardwood is expected by Canada, but for its production only a marginal increase is forecast.

44. In Europe, a modest recovery of demand for sawn hardwood has been evident in 1983, essentially due to a tendency to replenish much reduced stocks, primarily of higher quality assortments, and to some revival of activity in housing construction and of furniture manufacture in a few countries in western Europe. Domestic requirements of sawn hardwood in Europe are forecast to show a modest increase of 175,000 m³ or about 1% in 1983 compared to 1982, and production a slightly stronger one of 0.27 million m³, or 1 1/2%. Only the United Kingdom and the Federal Republic of Germany are expecting requirements to increase to an appreciable extent, and these two countries are the ones together with the Netherlands, to forecast the most significant increases in imports of sawn hardwood in 1983 among European countries. An appreciable fall in domestic requirements of sawn hardwood in 1983 of 0.16 million m³, or 7%, to 2.07 million m³ is forecast by Italy, whose imports of this assortment in 1983 are at the same time expected to drop by 0.17 million m³, or 16% in 1983. A fall of 0.05 million m³, or 10%, in 1983 is also forecast for imports of sawn hardwood by France. For Europe as a whole imports in 1983 are expected to increase by 0.23 million m³, or 5%, compared to 1982, and exports by 0.11 million m³, also by 5%.

45. The increase in exports is almost entirely due to higher exports forecast by France to several European countries, following the substantially increased cost of imports of sawn hardwood from the United States, due to the appreciation of the United States dollar and rising prices for many hardwood assortments in that country. The forecast increase in European imports of sawn hardwood is due entirely to a corresponding increase in imports of tropical sawn hardwood. Imports from temperate-zone sources are expected to be slightly lower in 1983 compared to 1982, a marked drop for Italy's imports being offset by higher imports by the Federal Republic of Germany and the Netherlands.

46. Attention was drawn to the differing market trends for higher and for lower quality assortments of temperate-zone hardwoods. While the former continued to be sought after and had been firm in price even under conditions of reduced market demand, the lower qualities had been increasingly difficult to market, not only because of the generally reduced level of activity in the hardwood-using sectors, but also because many formerly important uses for these qualities, for instance as sleepers and in mining had declined.

47. For 1984, the Committee expected a further marginal increase of 0.1% in Europe's domestic requirements of sawn hardwood, and a somewhat larger one, of 0.2 million m³, or 1%, for production. European imports in 1984 were forecast to decline by 0.09 million m³ or 2% to 5.0 million m³, due to a corresponding fall in imports of temperate-zone species, and exports to rise by 0.13 million m³, or 5% chiefly due to higher exports by Czechoslovakia and Yugoslavia.

48. Hardwood log requirements in Europe are forecast to increase slightly in 1983 by 0.22 million m³ or 6%, and production more strongly by 0.9 million m³, or 2 1/2%, due to appreciably higher forecast production in Finland, France and the Federal Republic of Germany. For European imports of hardwood logs in 1983, a fall of 0.3 million m³ or 5%, is forecast, mainly due to lower imports of tropical species by Italy and Portugal. A small increase is forecast for European exports of hardwood logs in 1983, essentially due to higher exports by France.

49. A certain revival in activity of major hardwood-using sectors and the increased cost from North American sources was reflected in improving demand from European sources, for which the better qualities, particularly of oak, showed a rising price trend at auction sales in the autumn of 1983. As in the case of sawn hardwood, lower quality logs, on the other hand, were facing increasing difficulties to find outlets. It was suggested, therefore, that this problem be given closer attention.

50. For 1984, the Committee forecast a further increase of 2% for both European domestic requirements and production of hardwood logs, a smaller increase for its imports, and a drop of 5% for its exports.

51. Attention was drawn to the longer-term trends in the supply of logs of tropical hardwood species. An important factor in this connexion, apart from dwindling resources in some formerly important supplier countries, was the trend to processing in the producing countries both with a view to adding value to exportable products and to providing employment to populations.

52. It was pointed out that there were still large forest-rich areas where population density was low and exports of logs were likely to continue for the foreseeable future. For the trade and the woodworking industries in the importing countries, it was important however to find acceptance for changes in the species composition of imports which were likely to result from the moving of logging activities to new areas and regions. The trade would also benefit from working actively with others concerned to improve management techniques which would ensure the long-term conservation of the tropical forest.

53. In this connexion attention was also drawn to the interrelationship between the markets for tropical hardwoods in the ECE region and those elsewhere, notably Japan, other Asian importers and tropical producers. The Committee agreed to renew its efforts to involve these countries in its market activities.

(d) Wood-based panels

54. After having fallen for three years in succession, consumption of wood-based panels in North America and Europe staged a partial recovery in 1983, which was strong in North America, but much more restrained in Europe. For domestic requirements of plywood in the United States a rise of 4.0 million m³, or 29%, to 17.9 million m³ is forecast, and for production an increase of 3.6 million m³, or 27%, to 16.9 million m³. Domestic requirements of particle board and fibreboard are forecast to increase by 1.3 million m³ (24%) and 1.9 million m³ (41%) respectively, and production by similar amounts. Markedly higher domestic requirements and production of all three panels in 1983 than in 1982 were also forecast by Canada.

55. For 1984, the recovery of the wood-based panels markets in North America was expected to continue at a more moderate pace. Domestic requirements and production of plywood in the United States were both forecast to increase by 0.6 million m³ or 3%. Increases of 0.4 million m³, or 6%, were forecast for domestic requirements and production of particle board, but only small increases for fibreboard.

56. For Europe, domestic requirements of particle board in 1983 are forecast to rise by 0.35 million m³ or 1 1/2%, and production more strongly by 0.5 million m³ or 2%. Substantially higher domestic requirements are forecast by the United Kingdom and Poland. Relatively important increases in production are forecast by Czechoslovakia, Poland, Spain and Sweden. For Europe's imports of particle board in 1983, a rise of 0.1 million m³ or 2% is forecast over 1982, and for exports a somewhat larger one of 0.23 million m³, or nearly 6%, due mainly to higher exports by Belgium-Luxembourg and Czechoslovakia.

57. Marginal increases are forecast for Europe's domestic requirements and production of plywood in 1983. For imports, a rise of 0.23 million m³ or 8% is forecast, due to higher imports by the Federal Republic of Germany, the Netherlands and the United Kingdom, which contrasts with an unchanged level forecast for Europe's exports.

58. Slightly higher increases than for plywood are forecast for Europe's domestic requirements and production of fibreboard in 1983. Little change, on the other hand, is expected for trade in fibreboard in 1983.

59. For 1984, the Committee's forecasts expect further increases in Europe's domestic requirements and production of particle board of 0.35 million m³ (1 1/2%) and 0.53 million m³ (2%) respectively, with a majority of countries expecting an increase in production. A small decline is forecast for imports, but an increase of 0.23 million m³ or - 5% is foreseen for exports, in particular for exports from Belgium-Luxembourg and Czechoslovakia.

60. Small rises are forecast for Europe's domestic requirements, production and exports of plywood in 1984, but a fall in imports of over 4%.

61. For fibreboard, increases of some 4% are forecast for Europe's domestic requirements and production and of 10% for its exports, largely due to new export capacity coming on stream in Ireland. Little change is expected for its imports.

62. During the discussion, attention was drawn to the continuing problem of over-capacity in large parts of the European wood-based panels industry which remained acute despite the restructuring process that has been going on for some time. It was felt, however, that a more general recovery in construction activity would be needed for this excess capacity to be gradually absorbed.

63. Reference was also made to the increasing difficulties for panels to widen their fields of application by developing new uses. The trend towards manufacturing special panels for specific uses had already progressed significantly in Europe, where, as an example, 40% of the plywood produced was now of that type. The widening use of plywood in timber-frame construction was quoted as a positive example of a new application.

64. Nevertheless, concern was expressed at the prospect of greatly increased plywood production capacities being built up in several areas rich in tropical forest resources, much of whose production would be directed towards the markets of industrialized countries, with potentially disruptive effects.

65. For plywood markets, a continuing problem of great concern were the import quota schemes operated by the European Economic Community. Another disturbing factor, notably for the plywood sector, was the sharp monetary fluctuations which often had a more decisive effect than fluctuations in quoted prices.

(e) Pulpwood

66. The Committee noted that 1982 had turned out to be a very unsatisfactory year worldwide for the pulp and paper sector. Production of almost all grades of pulp, paper and paperboard had dropped significantly in both Europe and North America. In 1983, however, the situation for pulp and paper demand appears to have improved, notably in North America. Production of pulp, paper and paperboard in the United States in the first half of 1983 was sharply above that of the same period in 1982. Encouraging results were also reported by some European countries, although the trend was not as clear cut as in North America. This improved demand caused a tightening of the international pulp market and pulp prices rose slightly.

67. The Committee therefore forecast for 1983 a widespread rise in demand for pulpwood. European domestic requirements are expected to rise by 5% to 163.3 million m³. For Sweden they are expected to rise by 9% to 35.5 million m³ and in Finland also by 9% to 32.0 million m³. Domestic requirements in the United States are expected to rise by 9% to 197.8 million m³. European domestic supply is also expected to rise by 3% to 156.9 million m³. In Sweden, an increase in domestic supply is forecast of 6% to 34.7 million m³. Finland, however, forecast a fall of nearly 2% to 27.9 million m³, due to tensions on the local roundwood markets. There were also significant differences between the trends for the various assortments. European domestic supply of broadleaved pulpwood is forecast to rise by 10% and of residues, chips and particles by 7%, while that of coniferous pulpwood is expected to fall slightly, because of developments in Finland and a number of other countries. In several countries, sawmill residues appeared to be substituting for round pulpwood, essentially for cost reasons. The United States foresaw an 8% increase in domestic supply, to 198.9 million m³, affecting all assortments.

68. European pulpwood trade on the other hand is expected by the Committee to continue to fall in 1983, by 6% for imports and 4% for exports. Contrasting trends are forecast by the two major European pulpwood importers: Sweden foresees a drop of over 33% to 2.1 million m³, while Finland forecasts an increase of 13% to 5.4 million m³. Exports by the United States (mostly to Japan) are expected to fall to 4.4 million m³, while Canadian pulpwood exports, mostly to the United States, are expected to rise to 3.4 million m³. Pulpwood exports by the USSR are expected to remain stable, at around 5.3 million m³.

69. For 1984, the Committee forecast continued growth in pulpwood requirements. European domestic requirements are expected to rise by 3% to 168 million m³ and those in the United States by nearly 5% to 207 million m³. An increase of 5% is also expected for domestic supply in the United States, but for Europe, only a marginal increase is expected. European imports are forecast to rise slightly (+2%), but exports to fall by 6%. Pulpwood exports by Canada and the United States are expected to rise in 1984 by 18% and 20% respectively.

70. The Committee noted that the pattern of international trade in pulpwood was quite volatile although some major structural changes had taken place over the last ten years. In the short term, forest catastrophes, such as windblow or mortality due to air pollution or insect damage could create new sources of pulpwood supply. Several instances of this were cited in the discussion, including the windblow in France in November 1982 (10 million m³ of which 2.4 million m³ pulpwood), and snow damage in the German Democratic Republic. In the Federal Republic of Germany, it had so far been possible to market timber damaged by air pollution through normal channels, although some marketing problems for pollution-damaged timber may have been encountered elsewhere.

71. Some delegations drew attention to the fact that the pulpwood-using industries (pulp, particle board and fibreboard) were competing for small-sized wood with other uses, notably energy and specialized sawmills capable of sawing very small logs. Sometimes, the pulpwood-using industries' ability to compete was reduced by their poor financial health, due partly to low profitability.

(f) Organization of market discussions and publications

72. On the basis of TIM/R.87, the Committee discussed the format of the Review published each year after the Committee's annual session and containing the Committee's assessment of the forest products markets and their prospects for the coming year, together with the detailed forecasts prepared by countries for the purpose of the market discussion, as well as statistics for production and trade in the first half of the current and past years. It had been regular practice to include in the text additional information from countries' written market statements, from the market discussion as well as from other sources. This had been one of the causes for delays in publication of the Review in recent years which had given rise to concern within the secretariat over the topicality of the Review for its users.

73. The Committee agreed that in 1983 the Review should contain only the Committee's assessment of the market and the finalized worksheets and be published as soon as possible after the Committee session. At its session in October 1984, the Committee would consider the matter again in order to determine, on the basis of the experience gained, whether this arrangement should be retained for the future.

74. The Committee noted that, in preparing forecasts for its annual session, the definitions of softwood and hardwood logs were not being consistently applied by all countries. Some treated 'production' of these assortments as 'removals'; others as the volume made available to meet the input (requirements) of the sawmilling industries. While it was important that figures given in the forecasts should be consistent between one year and another, it was also desirable that the base figures (for this session, for 1982) should also be consistent with official data published in the Timber Bulletin for Europe. The Committee invited the office-holders to clarify this issue and for countries to be instructed how to deal with it in their forecasts for the 1984 and subsequent sessions. The problem also applied to pulpwood.

Study of European timber trends and prospects (Item 7 of the Agenda)

(a) Progress report

75. The Committee was informed of progress on the new study (ETTS IV) on the basis of TIM/R.88. Since the Committee's fortieth session, teams of country correspondents had been set up, data collected and work carried out on forest inventory assessment, potential roundwood supply (see paras. 83 to 86 below) and energy questions (see paras. 80 to 82 below). Investigations had also been carried out into the methodology of preparing demand scenarios, a central question in outlook studies. In addition eight 'mini-seminars' had been held or were planned. The object of these mini-seminars was for the secretariat to familiarize itself with the conditions in individual countries. The mini-seminars represented a complementary approach to purely quantitative analysis.

76. The Committee considered that work on ETTS IV was proceeding satisfactorily and reiterated the importance it attached to this project. Long-term outlook studies, producing quantified analysis of possible future scenarios were considered an essential tool for effective planning and policy formulation at the national level. The Committee warmly thanked those countries which had made supplementary resources available, whether by seconding experts, providing travel assistance to the secretariat or by contributing to the ETTS IV Trust Fund. It welcomed these contributions as a further indication of the priority which countries attached to this project. It urged member countries which had not done so to consider contributing in one of the above-mentioned ways to the study.

77. The Committee welcomed the continuing co-operation in the field of outlook studies with other international organizations, notably FAO, whose study on the outlook for pulp and paper would provide useful input for ETTS IV, and IIASA.

78. The Committee recognized that if problems were encountered in coordinating the work of the teams of correspondents, it might be necessary to bring them together in Geneva for a briefing session. The Committee authorized the secretariat to convene such an informal meeting if it were considered necessary. Probably only one correspondent from each country would need to attend. Alternatively, if problems arose for a particular country, its correspondents were welcome to come to Geneva at any time to discuss them with the secretariat.

79. The Committee agreed with the timetable proposed:

- first draft in November/December 1984
- review meeting May/June 1985
- revision and publication not later than the first half of 1986.

(b) Ad hoc meeting on the impact of energy developments on the forestry and forest products sector, 2-4 May 1983

80. The Committee was informed of the results of this meeting, on the basis of its report (T/M/EFC/AC.2/2). The ad hoc meeting had reviewed the many and complex interactions between the forest and forest products sector and the energy sector and had considered how energy factors might be incorporated into ETTS IV.

81. In view of the methodological difficulties and the wide variations between countries and even within a single country, the ad hoc meeting had recommended that the ETTS IV correspondents be requested to provide quantified estimates of the outlook for a number of energy-linked parameters in their country, as well as the assumptions on which these estimates were based.

82. An enquiry had been circulated by the secretariat in accordance with the ad hoc meeting's recommendations, with a request for replies by 10 October 1983. Nine replies had been received before the Committee session. The Committee urged those correspondents who had not yet replied to do so as soon as possible. Even incomplete replies, if received reasonably early, would be useful.

(c) Forecasts of the forest potential and wood raw material supply

83. The Committee was informed, on the basis of TIM/R.89, of progress on the preliminary results of the forest resource enquiry and of the new enquiry on forecasts of the forest potential and wood raw material supply. It noted the importance of disposing of comprehensive and reliable forest inventory data for use as a basis for the long-term outlook for the forestry situation and wood raw material supply in ETTS IV.

84. The Committee urged countries which had not provided revised and completed information on the forest resource to do so by 31 December 1983. It also asked those few countries which had not yet replied to the enquiry to do so as soon as possible.

85. The Committee noted that the enquiry on the long-term outlook for the forest potential and wood raw material supply, approved by the Working Party, had already been circulated and urged correspondents to reply by the deadline indicated. It requested the secretariat to explore the possibility of asking countries to reply to the following supplementary question, suggested by Mr. N-E. Nilsson (Sweden):

"What are the major factors which will affect the volume of growing stock per hectare to the year 2020 and to what extent will any changes which occur be due to change in age-class distribution, rotation length or the proportion of total production taken out in the form of thinnings?"

86. The Committee endorsed the secretariat's decision to send the full enquiry on the long-term outlook to correspondents nominated by countries to co-operate in the work on ETTS IV, with copies to the appropriate correspondents nominated for the forest resource enquiry, which should ensure that there was proper co-ordination in the preparation of countries' replies which should be received by 31 December 1983.

Study tour in the United Kingdom (Item 8 of the Agenda)

87. Mr. L. Strångh (Sweden) informed the Committee of the study tour that took place in the United Kingdom from 18 to 24 September 1983, with the theme: "The opportunity and challenge of an increasing forest resource in an import-dominated market". The study tour programme included visits to publicly and privately owned forests, an importers/converters yard, a particle board/MDF mill, a paperboard mill and a research station.

88. The Committee warmly thanked the United Kingdom authorities and the Forestry Commission for the excellent organization of the study tour that had permitted participants to discover the forestry and forest industries of a country that had traditionally been seen as essentially an importer, as well as for the generous hospitality extended to participants.

89. Noting the serious problems that had arisen for the organizers because of delays in receiving applications from participants, the Committee strongly urged governments to ensure that the programme was circulated in good time and that intending participants to future study tours as well as other meetings outside Geneva, respect the deadlines for registration.

Special topic: Structural changes in the forest industries sector to optimize the use of available wood raw material (Item 9 of the Agenda)

90. Mr. I. Predescu (Romania) informed the Committee of the developments in the forest and forest industries sector in his country tending towards an optimal utilization of available wood raw material. These include: a maximum use of wood biomass; a greater recovery of secondary wood resources; changes in the wood industries towards the production of more economically efficient products with higher added value. He stated that at present the Romanian forest and forest products sector was in a phase of evolution and adjustment and that the policy to be followed in the future will be based on the National Programme for conservation and development of forests for the period 1976-2010.

91. Mr. C. Peraza (Spain) informed the Committee of the historical evolution of forests and utilization of wood in his country. He described the structure of the forest and how it met the requirements of industrialization. He analysed the different plans established for the development of the forest and forest products sector as well as the achievements and structural changes of the latter, which had adapted itself to the domestic wood supply. In the long term, further development depended on improvement of the forest resource and better quality control.

92. Mr. J. Nordin (Sweden) presented to the Committee a case study of a Swedish integrated forest industry company and its structural changes during the last 25 years. The changes were made possible by expanding the raw material basis and by increasing the yield per cubic metre of raw material, thus increasing the added value per unit of wood.

93. The discussion which followed the presentations touched on a number of points, including the necessity to find satisfactory and economic uses for the products of thinning, the contribution of genetics and new species to improving the forest resource and the ecological limits on whole tree logging. The delegation of Czechoslovakia presented a paper on the structural changes in its country and the delegation of Sweden gave some additional information on recent developments in its country.

94. In view of their great interest, the Committee requested that the presentations be published as a supplement to the Timber Bulletin for Europe.

Activities of other ECE Principal Subsidiary Bodies of relevance to the Timber Committee (Item 10 of the Agenda)

95. The Committee was informed, on the basis of document TIM/R.91, of the activities of other Principal Subsidiary Bodies of ECE dealing with matters of concern to it. The Committee's attention was especially drawn to activities of other bodies relevant to its own work areas I (Medium and long-term trends and prospects) and IV (Environmental and resource conservation problems). The Committee took note of this information and agreed to take it into account when discussing its own programme of work.

96. The Committee was informed of the activities under the Convention on Long Range Transboundary Air Pollution which came into force on 16 March 1983, in particular the study on air pollution damage to forests which would be presented to the Working Group on effects of sulphur compounds on the environment. The Committee welcomed the continuing co-operation between its own secretariat and that of the Convention's Executive Body.

Programme of work for 1984-1988 (Item 11 of the Agenda)(a) Activities scheduled for 1984, including:

- (i) Joint FAO/ECE/ILO Committee on Forest Working Techniques and Training of Forest Workers

97. The Committee was first briefly informed of the activities of the Joint Committee which had taken place since the Committee's last session:

- Seminar on reducing biomass losses in logging operations, USSR, December 1982
- Seminar on machines and techniques for forest plant production, Czechoslovakia, June 1983
- Seminar on silvicultural, technological, economic and other problems connected with the mechanization of thinning operations, German Democratic Republic, September 1983
- Sixth session of the Joint Committee's Steering Committee, Geneva, May 1983.

98. The Committee was also informed of the preparations for the fifteenth session of the Joint Committee, to be held in Izmir from 22 to 25 May 1984 at the invitation of the Government of Turkey. The session will be preceded by a study tour in Turkey (14-17 May) and a seminar on techniques and machines for the rehabilitation of low-productivity forest (Izmir, 18-21 May). The Committee noted that the provisional agenda for the fifteenth session (TIM/EFC/WP.1/13) had just been issued. The detailed information note on the session, study tour and seminar (TIM/EFC/WP.1/R.47, TIM/EFC/WP.1/SEM.18/1) would be issued shortly.

99. On behalf of his Government, the delegate of Turkey expressed his satisfaction at the opportunity offered to his country to host the fifteenth session of the Joint Committee and the study tour and seminar. The Committee supported his insistence on the importance of timely registration of participants, so as to facilitate the preparation of these events from the organizational point of view.

100. The Committee noted that the two following seminars will be organized as national seminars, in collaboration with the Joint Committee:

- Seminar on ergonomics applied to forestry, Austria, October 1983
- Seminar on extension services for private forest owners, USA, autumn 1984.

101. The question of principle was raised of such national seminars being held with only one official working language, i.e. without the normal ECE facilities of full interpretation into the three working languages. The Committee was informed that this point had already been discussed by the Joint Committee's Steering Committee at its sixth session and that it had been "unanimously agreed that this kind of meeting should be accepted only in exceptional circumstances and that countries should be urged to organize regular Joint Committee meetings with three-language interpretation facilities" (TIM/EFC/WP.1/AC.1/6, para. 7). The Committee noted with satisfaction, however, that the Austrian Government would provide language help for the expert from the USSR who will participate in the Seminar on Ergonomics in Austria.

(ii) Study tour in Switzerland, October 1984

102. The Committee was informed of the preparations for the study tour in Switzerland which will take place from 12 to 17 October 1984 immediately after the Committee's forty-second session. The theme of the tour will be "Special problems of the forestry and forest products sector in Switzerland". The Committee urged governments to ensure that intending participants respect the deadlines for registration.

(b) Review and revision of the draft programme of work for 1984-1988

103. The Committee considered its programme of work on the basis of a draft prepared by the secretariat (TIM/R.92), which took into account the programme the Committee had approved at its fortieth session, decisions and discussions of the Commission at its thirty-eighth session, and the results of meetings of the Committee's subsidiary bodies. The Committee also took into account its discussions and decisions under other items of the agenda.

104. The Committee invited the leader of the team of specialists dealing with project 14.2.4. - Standardization of stress grading and finger-jointing of coniferous sawn timber to consider the desirability of convening an informal meeting of the team to discuss and initiate action on the work foreseen for 1984 in the programme of work.

105. The Committee decided to incorporate project 14.2.5. - Reduction in the number of standard dimensions entering international trade in project 14.2.3. - Review of standardization activities.

106. The Committee invited the fifteenth session of the Joint FAO/ECE/ILO Committee on Forest Working Techniques and Training of Forest Workers to consider what action should be taken in regard to the proposals of the USSR concerning project 14.3.1.2.6. - Harvesting of wood for energy purposes (see TIM/R.92, Annex I).

107. Regarding project 14.4.2. - Energy conservation and self-sufficiency in the mechanical wood-processing industries, the Committee supported the suggestion that the reconstituted team of specialists hold an inaugural meeting, at which its activities should be defined, taking the proposals of the USSR contained in TIM/R.92, Annex I as a basis. The team should also agree on methods of work. If possible, a study by the team on the technical aspects of the generation of energy from wood should be submitted to the forty-second session of the Committee, as provided for in the programme of work. The Committee accepted that it might only be possible to submit a progress report to that session, depending on when the team could meet and start work.

108. The Committee took note of the concern about damage to forests due to air pollution in both Europe and North America, and stressed the necessity of contributing to the expanding national and international effort to combat this threat. At the same time, it was underlined that the Committee should only undertake work which was appropriate to its mandate, structure and resources and avoid duplicating the activities of other international organizations. In this context the Committee was informed of the activities being carried out under the auspices of the Executive Body for the Convention on Long-Range Transboundary Air Pollution (see para 96), the FAO European Forestry Commission, the European Economic Community and IUFRO.

109. On the suggestion of the delegation of the Federal Republic of Germany, it was decided that a report on the implications of air pollution damage to forests for wood supply and forest products markets should be prepared for the Committee. The report should also draw conclusions and make recommendations for action in the forestry and the forest products sector. The report should be prepared by a consultant or seconded national expert, who would take as a starting point the report being prepared for the Working Group on effects of sulphur compounds on the environment (under the Convention on Long-Range Transboundary Air Pollution) and the documentation which would be submitted to the session of the FAO European Forestry Commission in December 1983. The correspondents for Part III of the Forest Resource Enquiry - the role of forests in supplying environmental and other non-wood goods and services (which contained a question on the effect of non-wood functions on wood production) - should be requested to estimate, if possible in quantitative terms, the medium-term (2-10 years) effect on wood supply of air pollution damage (partial or complete destruction of forests, sanitation fellings, changes in quality of roundwood harvested, etc.). Replies should be requested by 31 January 1984. The consultant should prepare the first version of the report and draft conclusions and recommendations. An informal group with representatives of the other interested bodies (see para. 108) might be convened to give preliminary consideration to the report, notably the draft conclusions and recommendations, if the secretariat considered this necessary. The completed report should be submitted to the forty-second session of the Committee, which would decide on future activities of the Committee in this field.

110. The Committee stressed that the secretariat should take fully into account all factors relating to air pollution damage when drafting ETTS IV and other studies analysing future wood supply. The report mentioned above, including the information provided by the correspondents for Part III of the Forest Resource Enquiry, would provide useful information on this point. In this connexion, the Committee endorsed the decision of the Joint FAO/ECE Working Party on Forest Economics and Statistics to decide at its fifteenth session on further work in the evaluation of damage to forests, in the light of experience gained and activities undertaken by other international bodies, notably the FAO European Forestry Commission.

111. The Committee noted that when officials, foresters and other members of the sector were faced with sudden and severe damage to the forest, for instance because of fire, windblow, snow or insect infestation, their task would be made easier if they had rapid access to the experience and expertise of other countries. The Committee decided, therefore, to publish a document on ways of dealing with sudden and severe damage to forests which would include:

- a number of relevant publications or reports describing the technical (harvesting, transport, storage, regeneration) economic, social or fiscal measures taken in reaction to such damage;
- a list of institutions whose advice or assistance in the form of equipment or labour could be useful.

112. The Committee requested the secretariat to collect from countries relevant publications or reports and a list of institutions and to compile a draft publication. Work in progress should be presented to the fifteenth session of the Joint FAO/ECE/ILO Committee on Forest Working Techniques and Training of Forest Workers in May 1984, which was invited to consider whether to propose a role that it could play in this field. It was pointed out that many relevant publications or reports already existed and should be used where possible.

113. It was felt that there was also a need for rapid international dissemination of reliable information on the nature and extent of sudden and extensive damage to forests. This information could notably be useful in reducing disruption of the roundwood markets. The Committee therefore proposed that a system be set up whereby a country affected by a major instance of forest damage, notably if it appeared that there might be potential international consequences, should provide details to the secretariat immediately. The secretariat would transmit this information to other member countries. Governments were invited to inform the secretariat, by 31 January 1984, of the address to which such information should be sent.

114. It was also suggested that a permanent body be set up to help ECE countries faced with sudden and severe damage to their forests. Such a body would collect and maintain a wide range of information relevant to this problem. The Committee felt that this suggestion should be reconsidered in the light of experience with the arrangements outlined above.

115. For project 14.5.5. - Dissemination and exchange of general information and experience, the Committee invited Member Governments to consider the possibility of organizing a study tour for the Timber Committee in 1985 or later.

Other business (Item 12 of the Agenda)

116. The Committee was informed by the Polish delegation of the present situation as regards insect infestation of Polish forests and the measures taken to combat it. Written information was made available to delegations. The Committee thanked the Polish delegation for this information.

Adoption of the report of the Committee's session (Item 13 of the Agenda)

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

Date of next session

118. The Committee agreed that its next session should be held from 8 to 12 October 1984, subject to the availability of conference services for that period. In doing so, it took into account the proposal of Switzerland to hold the study tour from 12 (evening) to 17 October 1984.

Annex 1 - Annexe 1

Europe (excl. USSR) : Summary table of market forecasts for 1983 and 1984
 Europe (moins URSS) : Tableau recapitulatif des previsions du marche pour 1983 et 1984

(million m3 - millions m3)

	Domestic Requirements Besoins nationaux				Production				Imports Importations				Exports Exportations			
	1982 (actual) (reels)	1983 (estimates) (previsions)	1984 (estimates) (previsions)	1984 (estimates) (previsions)	1982 (actual) (reels)	1983 (estimates) (previsions)	1984 (estimates) (previsions)	1984 (estimates) (previsions)	1982 (actual) (reels)	1983 (estimates) (previsions)	1984 (estimates) (previsions)	1984 (estimates) (previsions)	1982 (actual) (reels)	1983 (estimates) (previsions)	1984 (estimates) (previsions)	1984 (estimates) (previsions)
Sawn softwood	72.85	74.91	75.70	72.93	68.13	71.91	72.93		25.21	25.86	25.58		21.12	22.83	23.05	Sciages resineux
Coniferous logs	121.05	126.51	128.95	126.49	118.76	126.07	126.49		5.61	5.63	5.27		3.16	3.06	2.75	Grumes de resineux
Sawn hardwood	20.45	20.63	20.65	18.27	17.81	18.08	18.27		4.81	5.04	4.94		2.33	2.44	2.57	Sciages feuillus
- temperate zone *		2.18	2.14	2.06		2.09	2.20	2.34	- zone temperée *
- tropical *		2.64	2.90	2.88		0.24	0.24	0.23	- zone tropicale *
Hardwood logs	38.05	38.28	39.13	34.95	33.36	34.23	34.95		6.46	6.12	6.19		2.17	2.25	2.14	Grumes de feuillus
- temperate zone *		2.30	2.36	2.32		2.09	2.17	2.06	- zone temperée *
- tropical *		4.17	3.76	3.87		0.08	0.08	0.08	- zone tropicale *
Particle board	22.99	23.34	23.68	23.87	22.83	23.33	23.87		4.36	4.46	4.39		4.16	4.38	4.61	Panneaux de particules
Plywood	4.90	4.96	4.99	3.42	3.37	3.37	3.42		2.86	3.09	2.95		1.44	1.43	1.45	Contreplaques
Fibreboard	4.24	4.25	4.38	4.35	4.06	4.16	4.35		1.17	1.18	1.18		1.01	1.05	1.15	Panneaux de fibres
- Hardboard	2.87	2.88	2.96	2.94	2.73	2.76	2.94		0.75	0.77	0.78		0.63	0.67	0.78	- Durs
- Insulating board	1.37	1.37	1.42	1.42	1.34	1.40	1.42		0.42	0.41	0.40		0.38	0.37	0.38	- Isolants
Pulpwood	154.89	163.30	168.22	157.46	151.70	156.90	157.46		20.40	19.25	19.67		13.40	12.82	12.08	Bois de trituration
- roundwood	112.95	118.63	110.39	112.64	..		15.86	15.32	..		10.06	9.25	..	- Bois ronds
- coniferous *	78.04	82.62	81.31	80.66	..		9.06	8.81	..		6.24	5.42	..	- resineux *
- broadleaved *	34.92	36.01	29.07	31.98	..		6.80	6.51	..		3.82	3.83	..	- feuillus *
- residues, chips and particles *	41.94	44.67	41.31	44.25	..		4.54	3.93	..		3.34	3.57	..	- Dechets, plaquettes et particules *

ANNEX II

TIMBER COMMITTEE PROGRAMME OF WORK FOR 1984-1988

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

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

Description: The Committee will keep under review long-term trends in production, trade, consumption and prices of forest products, comparing them with projections made in the long-term study, both to check the accuracy of the analyses presented in the study and in order to provide early warning of changes in trends, thus enabling governments to review their long-term forest policies in the light of recent developments. 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 of 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 and 1986 for final publication.

Duration: Continuing.

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

14.1.2.1. The wood-based panels industries

Description: The Committee will 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: Preliminary results of the 3-yearly enquiry were reviewed by the fourteenth session of the Joint FAO/ECE Working Party on Forest Economics and Statistics.

Work to be undertaken: Countries will revise and complete their replies to the enquiry and the results will be published in a supplement to the Timber Bulletin for Europe. The next survey will be undertaken in 1985/86.

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: A draft form of enquiry, prepared by a team of specialists, was approved by the Timber Committee. Countries were invited to take steps to collect the information called for in the enquiry in readiness for its circulation.

Work to be undertaken: The enquiry will be circulated to countries in late 1983. A seminar will be held in Finland in June 1984, in conjunction with a meeting of the team of specialists, on the methodology of data collection on the sawmilling industry, intended especially for experts from developing countries. The team will review the preliminary results of the enquiry, which will be revised and transmitted to the fifteenth session of the Joint Working Party on Forest Economics and Statistics.

Duration: Continuing.

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

Description: The Committee will review medium-term (3-5 years) trends in the production, consumption, trade and prices of major forest products so that governments may be continuously informed of structural trends in the forest products markets of the ECE region.

Work accomplished: The medium-term survey of the markets for pulpwood, wood for energy and miscellaneous roundwood was published.

Work to be undertaken: Further medium-term surveys will be postponed until after completion of the long-term study (project 14.1.1.). 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.

14.1.4. Trends, prospects and policies in southern Europe

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

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.

WORK AREA 14.2: CURRENT MARKET DEVELOPMENTS AND SHORT-TERM PROSPECTS,
INCLUDING PROBLEMS RELATING TO INTERNATIONAL TRADE

14.2.1. Review of production, trade, consumption and prices of forest products

Description: The Committee will analyse, on a continuous basis, short-term trends in the production, trade, 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, consumption and prices 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 14.5.1.

Duration: Continuing.

14.2.2. Rationalization of the flow of forest products from the forest to the consumer, including transport and handling problems

Description: The Committee will review the distribution chain for forest products from the forest to the consumer, including transport and handling problems, and identify areas where it might recommend any action which it considers necessary to rationalize the flow of products and to increase efficiency with a view to facilitating international trade.

Work to be undertaken: The Committee will decide on activities in this field, as and when appropriate.

Duration: To be decided.

14.2.3. 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 (14.2.4.). 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 14.2.4. It will also maintain co-operation with ISO and its appropriate technical committees.

Duration: Continuing.

14.2.4. 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: Countries were invited to supply the secretariat with the names of "contact points" that will receive the approval forms intended to facilitate the opening of trade in stress graded or finger-jointed coniferous sawn timber, and the names of their correspondents to help monitor the implementation of the ECE recommended standards.

Work to be undertaken: The Committee will draw up, publish and maintain a list of these contact points. The team of specialists will carry out an enquiry in 1983/84 into progress in implementing the standards; and will take steps at the appropriate time to reconcile the European and North American systems of stress grading.

Duration: 2 years ending in 1984.

14.2.5. 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 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.

WORK AREA 14.3: SELECTED ECONOMIC, TECHNOLOGICAL AND MANAGERIAL PROBLEMS

14.3.1. Forest working techniques and training of forest workers

This project is covered by the activities of the Joint FAO/ECE/ILO Committee on Forest Working Techniques and Training of Forest Workers, which normally meets biennially (1984, 1986, 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.

The project components are set out below under three main headings:

1. Silvicultural operations and general management aspects;
2. Wood harvesting and transport; and
3. Human aspects of forest operations.

14.3.1.1. Silvicultural operations and general management aspects

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

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

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: Seminars on selected items will be organized at intervals. Decisions on future work will be taken at the fifteenth session of the Joint Committee in 1984 in the light of the recommendations of the seminar in Czechoslovakia.

Duration: Continuing.

14.3.1.1.2. Forest fire prevention and control

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

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.

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. An enquiry will be circulated to collect information on the basis of which the team will prepare basic papers on the main topics 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 14.5.2.5.).

Duration: 2 years ending in 1985.

14.3.1.1.3. 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^{1/} on the planning and management of forest operations, possibly in conjunction with the sixteenth session of the Joint Committee.

Duration: 3 years ending in 1986.

^{1/} Subject to confirmation.

14.3.1.1.4. 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 its work on a study on methods and equipment for afforestation operations under Mediterranean conditions to the sixth session of the Steering Committee in 1983.

Work to be undertaken: (a) The team of specialists will submit the draft study on methods and equipment for afforestation operations under Mediterranean conditions to the seminar on techniques and machines for the rehabilitation of low productivity forest and the fifteenth session of the Joint Committee in 1984;

(b) A seminar will be held in Turkey in 1984 on machines and techniques for the rehabilitation of low productivity forest in conjunction with the fifteenth session of the Joint Committee.

Duration: 3 years ending in 1986.

14.3.1.1.5. 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 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) Lists of basic terms and concepts, with definitions, are issued in the 3 working languages for seminars held under the auspices of the Joint Committee;

(c) Subject to the approval by the Joint Committee at its fifteenth session, an informal group will be established during each seminar to select and define additional terms, and for a revised glossary to be prepared after the seminar.

Duration: Continuing.

14.3.1.2. Wood harvesting and transport

14.3.1.2.1. Development and use of logging machinery

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

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.

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;

(b) a team of specialists will submit a report on the compatibility of harvesting methods and equipment with silviculture and the environment to the seminar on mechanization of logging operations in mountainous regions in 1985;

(c) a special discussion on the use of different types of aircraft in forest operations will be held at the fifteenth session of the Joint Committee.

Duration: (a) Continuing; (b) 2 years ending in 1985; (c) to be decided by the Joint Committee at its fifteenth session.

14.3.1.2.2. Location and methods of primary roundwood conversion

Description: The Joint Committee will study the optimum location for the primary conversion of wood raw material and the extent and type of conversion carried out under different conditions, with a view to reducing the costs of raw material to the user, optimizing the quality assortments, reducing harvesting losses and minimizing damage to the environment.

Work accomplished: A proposal for the work on the project was submitted to the sixth session of the Steering Committee.

Work to be undertaken: Reports on recent trends and developments in the location and methods of primary roundwood conversion will be submitted to the fifteenth session of the Joint Committee in 1984, which will decide on appropriate further action.

Duration: To be decided by the Joint Committee at its fifteenth session.

14.3.1.2.3. 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 seminar on methods and techniques of forest road construction will be held in 1984 (or 1985) in (country to be decided).

Duration: 2 years ending in 1985.

14.3.1.2.4. Terrain classification from the wood harvesting point of view

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

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

Work to be undertaken: The team of specialists will complete its proposals on a descriptive terrain classification and submit them to the fifteenth session of the Joint Committee which will decide whether and what further work should be undertaken in this field.

Duration: To be decided by the Joint Committee at its fifteenth session.

14.3.1.2.5. Compatibility of harvesting methods and equipment with silviculture and the environment

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

Work accomplished: A team of specialists submitted a progress report on its work on the project to the sixth session of the Steering Committee in 1983.

Work to be undertaken: The team of specialists will submit a progress report on the state of the project to the fifteenth session of the Joint Committee, and a final report to the seminar on mechanization of logging operations in mountainous regions in 1985.

Duration: 2 years ending in 1985.

14.3.1.2.6. Harvesting of wood for energy purposes

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

Work accomplished and to be undertaken: A team of specialists presents a report on activities in the field of wood harvesting for energy purposes to the biennial sessions of the Joint Committee, including activities of other international organizations, notably the International Energy Agency. The Joint Committee will decide what action should be taken in response to the USSR proposals in TIM/R.92, Annex I.

Duration: Continuing.

14.3.1.3. Human aspects of forest operations

14.3.1.3.1. 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 improve working practices with regard to safety and health.

Work accomplished: A meeting to prepare for the seminar on extension education and technical services to private forest landowners was held in March 1983.

Work to be undertaken: (a) A seminar on extension education and technical services to private forest landowners will be organized by the Government of the United States in October 1984 in collaboration with the Joint Committee;

(b) A team of specialists on vocational training and extension services for small-scale forest owners will collaborate on the preparation of the US seminar mentioned above.

Duration: 1 year ending in 1984.

14.3.1.3.2. 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: A team of specialists on problems of vocational training of forest workers will start work after the fifteenth session of the Joint Committee and submit a report to the sixteenth session of the Joint Committee in 1986.

Duration: 2 years beginning in 1984.

14.3.1.3.3. 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 to be undertaken: Seminars will be organized at intervals on selected problems:

(a) A seminar on ergonomics applied to forestry was organized by the Government of Austria in October 1983 in collaboration with the Joint Committee and IUFGO;

(b) A seminar on vocational rehabilitation and occupational health services for forest workers will be held in Finland in 1985 in collaboration with Sweden.

Duration: (a) Continuing;
(b) 2 years ending in 1985.

14.3.1.3.4. 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 team of specialists on chemicals in forestry was set up.

Work to be undertaken: A proposal for the team's terms of reference and programme of work will be submitted to the fifteenth session of the Joint Committee in 1984. A report on the use of chemicals in forestry, with recommendations, will be submitted to the sixteenth session of the Joint Committee in 1986.

Duration: 3 years ending in 1986.

14.3.2. Utilization of tropical hardwoods

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

Work accomplished and to be undertaken: Co-operation is maintained with UNCTAD and FAO in their activities relating to markets for tropical timber.

Duration: To be decided.

14.3.3. Economic and technical developments in the furniture industry

Description: The Committee will further the exchange of information on economic and technical developments in the furniture industry, with a view to assessing in quantitative and qualitative terms the use of forest products in that industry and the trends and prospects in the demand for forest products for that sector.

Work accomplished: Governments were invited to nominate experts to serve on a team of specialists, which should prepare a draft programme of activities in this field for consideration by the Timber Committee.

Work to be undertaken: Based on information which countries will be invited to provide, a report will be undertaken by a team of specialists under the leadership of Romania on economic and technical developments in the furniture industry and submitted to the Committee's forty-second session, which will then decide on further action.

Duration: 2 years ending in 1985.

14.3.4. Review of progress made in the chemical processing of wood (other than for pulp and paper) and the potential of the use of wood for chemical products

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

Work to be undertaken: On the basis of information provided by governments, the use of wood for chemical products will be taken account of in the new long-term study (project 14.1.1.). The Committee will also keep under review developments in the sector, undertaking periodic surveys as and when necessary.

Duration: Continuing.

WORK AREA 14.4: ENVIRONMENTAL AND RESOURCE CONSERVATION PROBLEMS

(All the Committee's activities in this work area will be carried out in co-operation with the Senior Advisers to ECE Governments on Environmental Problems).

14.4.1. Quantification and evaluation of the environmental benefits of forests

Description: The Joint FAO/ECE Working Party on Forest Economics and Statistics will examine methods of quantifying and evaluating the environmental benefits of forests with a view to assessing forests' contribution to society, to calculating compensation for the environmental services of forests and to facilitating comparisons between countries.

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: The preliminary results will be circulated to country correspondents for further comment and additional information; after 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 14.5.2.3.). The Working Party will review the results of this project at its fifteenth session, which will also be used in the study of long-term timber trends and prospects (Timber Committee project 14.1.1.).

Duration: 2 years ending in 1985.

14.4.2. 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 self-sufficiency in the mechanical wood-processing industries.

Work accomplished: A team of specialists was established, with the assistance of the USSR, to carry out a study on the technical aspects of the generation of energy from wood.

Work to be undertaken: The study will be submitted to the Committee's forty-second session, which will decide on further activities to be undertaken in the field of wood and energy.

Duration: 2 years ending in 1985.

14.4.3. 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: None (new project)

Work to be undertaken: A consultant, or seconded national expert, will prepare a report on the impact of air pollution damage to forests on wood supply and forest products markets, using material supplied by the above-mentioned bodies and the results of an enquiry to be circulated to correspondents for Part III of the Forest Resource Enquiry - The role of forests in supplying environmental and other non-wood goods and services (project 14.4.1). The report will include draft conclusions and recommendations for action in the forestry and forest products sector which, before being submitted to the Committee, might be discussed by an informally convened group of specialists including, among others, representatives of the bodies mentioned above. Further action will be decided upon by the forty-second session of the Committee in the light of the report.

Duration: 1 year ending in 1984.

14.4.4. 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 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: None (new project)

Work to be undertaken: Countries will be requested to provide relevant publications and a list of institutions that might be able to offer help or advice in the case of sudden and severe damage to forests. The secretariat will prepare a draft compilation of this information and submit it to the Committee, if possible at its forty-second session. In the event of sudden and severe damage to forests, the countries concerned should send a reliable assessment of the damage as soon as possible to the secretariat, which will circulate it rapidly. Countries will also be requested to supply the secretariat with the addresses to which the information should be sent.

Duration: Continuing

WORK AREA 14.5: COLLECTION, EXCHANGE AND DISSEMINATION OF INFORMATION, INCLUDING IMPROVEMENT AND HARMONIZATION OF STATISTICS (IN CO-OPERATION WITH FAO)

14.5.1. Timber Bulletin for Europe

Description: The Committee will collect statistics on production, trade and prices of forest products, with a view to providing governments and the forest products sector with data on the basis of which to formulate policies and make decisions.

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.

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

This project, together with projects 14.5.3. and 14.5.4. 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.

14.5.2.1. 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: The Working Party reviewed the results of the enquiry on the availability of information on stocks of forest products.

Work to be undertaken: The Working Party will formulate proposals for improving the Committee's programme of collection and dissemination of statistical data, with regard to its organization, method of collection, periodicity, and the improvement of the accuracy and comparability of data obtained from and used by governments. 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.

14.5.2.2. 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.

14.5.2.3 Forest resource analysis

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

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 14.4.1.

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

Duration: 2 years ending in 1985.

14.5.2.4. Labour statistics

Description: The Working Party, in co-operation with the Joint FAO/ECE/ILO Committee on Forest Working Techniques and Training of Forest Workers, will study labour input, average wage rates and earnings in forestry, with a view to providing more data on cost trends and a basis for comparison of employment and earnings.

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 as a supplement to the Timber Bulletin for Europe.

Duration: 1 year ending in 1984.

14.5.2.5. 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: The biennial enquiry was circulated and the results presented to the fourteenth session of the Working Party.

Work to be undertaken: Countries will be invited to check and complete the preliminary results of the enquiry. It will be completed and published as a supplement to the Timber Bulletin for Europe. 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 1984. A pilot study on damage to forests from causes in addition to forest fire will be prepared by Switzerland 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.

14.5.2.6. 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: An ad hoc meeting on this topic will be held in 1985, possibly in collaboration with IUFRO. Subject to confirmation, the host country will be Sweden.

Duration: 2 years ending in 1985.

14.5.3 Studies of selected economic problems

14.5.3.1. 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.

14.5.3.2. Economic aspects of afforestation and reforestation

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

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.

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

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

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.

14.5.4. Transfer of economic and statistical methods and experience in the forest and forest products sector

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

14.5.5. Dissemination and exchange of general information and experience

Description: The Committee will further the dissemination and exchange of information and experience on selected themes within its area of competence and by organizing annual study tours at the invitation of the countries concerned with a view to making available to governments and the forest products sector experience gained in individual countries.

Work accomplished: A study tour was held in the United Kingdom in 1983. The Timber Committee Yearbook 1982 was issued.

Work to be undertaken: A study tour will be held in Switzerland in 1984^{1/}. A Yearbook describing briefly the Committee's activities over the past year will be issued annually.

Duration: Continuing.

^{1/} Host countries to be decided for the years from 1985 to 1988 inclusive.

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Project number	Project	1984	1985	1986	1987	1988
	<u>WORK AREA 14.1 : MEDIUM- AND LONG-TERM TRENDS AND PROSPECTS</u>					
14.1.1.	Review of projections made in study " <u>European Timber Trends and Prospects, 1950-2000</u> " in relation to actual developments	Preparation of draft study, review by <u>ad hoc</u> meeting (1985), revision and publication (1986)			Further activities as decided by Committee	Pulpwood, wood for energy and miscellaneous roundwood
14.1.2.	Medium-term trends in the structure and capacity of wood-processing industries	Survey of sawmilling industry Seminar in Finland on methodology of data collection on the sawmilling industry		Survey of wood-based panels industries		
14.1.3.	Medium-term trends in the markets for specific forest products	Medium-term studies held in abeyance during preparations of long-term study (project 14.1.1.)		Wood-based panels	Sawnwood and sawlogs	
14.1.4.	Trends, prospects and policies in southern Europe	<u>Ad hoc</u> meeting on the production and marketing of products of specific interest to Mediterranean forestry (year and host country to be decided)				
	<u>WORK AREA 14.2 : CURRENT MARKET DEVELOPMENTS AND SHORT-TERM PROSPECTS, INCLUDING PROBLEMS RELATING TO INTERNATIONAL TRADE</u>					
14.2.1.	Review of production, trade, consumption and prices of forest products	Continuing				
14.2.2.	Rationalization of the flow of forest products from the forest to the consumer, including transport and handling problems	Committee to keep under review				
14.2.3.	Review of standardization activities	Continuing, co-operation maintained with ISO and its appropriate Technical Committees				
14.2.4.	Standardization of stress grading and finger-jointing of coniferous sawn timber	Implementation of follow-up recommendations	Study by team of specialists of implementation of standards			
14.2.5.	Problems of classification	Submission of proposed revision of parts of ISIC relating to forestry and forest industries to Conference of European Statisticians and other appropriate bodies	Submission of proposals on relevant parts of ILO ISCO to fifteenth session of Joint FAO/ECE Working Party on Forest Economics and Statistics			

Tabular presentation of Timber Committee programme of work for 1984-1988 (cont.)

Project number	Project	1984	1985	1986	1987	1988
	<u>WORK AREA 14.3 : SELECTED ECONOMIC, TECHNOLOGICAL AND MANAGERIAL PROBLEMS</u>					
14.3.1.	Forest working techniques and training of forest workers	Activities of the Joint FAO/ECE/ILO Committee on Forest Working Techniques and Training of Forest Workers				
		Fifteenth session in Turkey	Seventh session of Steering Committee	Sixteenth session ^{1/} in the Netherlands	Eighth session of Steering Committee	Seventeenth session ^{2/} in
14.3.1.1.	<u>Silvicultural operations and general management aspects</u>				Seminar in ^{2/} on	Seminar in ^{2/} on
14.3.1.1.1.	Development and use of machinery and methods for stand establishment, including planting stock and equipment					
14.3.1.1.2.	Forest fire prevention and control	Progress Report to fifteenth session by team of specialists	Seminar in Portugal			
14.3.1.1.3.	Methods and procedures for the preparation and implementation of working forest management plans			Seminar in the Netherlands on the planning and management of forest operations ^{1/}		
14.3.1.1.4.	Development of methods and equipment for silvicultural operations and multiple use forestry under Mediterranean conditions	Seminar in Turkey on techniques and machines for the rehabilitation of low-productivity forest Submission by team of specialists of draft of final study on afforestation methods and equipment under Mediterranean conditions to fifteenth session				
14.3.1.1.5.	Standardization activities in the field of forestry, including standardization of concepts and terms used by the Joint Committee	Review by Joint Committee on basis of report from ISO Terms and definitions to be prepared in connexion with each seminar		Review by Joint Committee on basis of report from ISO		
14.3.1.2.	<u>Wood harvesting and transport</u>			Seminar in ^{2/} on	Seminar in ^{2/} on	Seminar in ^{2/} on
14.3.1.2.1.	Development and use of logging machinery	Special discussion on the use of different types of aircraft in forest operations at fifteenth session	Seminar in USSR on mechanization of logging operations in mountainous regions			
14.3.1.2.2.	Location and methods of primary roundwood conversion	Submission of reports on recent trends and developments to fifteenth session				

^{1/} Subject to confirmation

^{2/} Host country to be decided

Tabular presentation of Timber Committee programme of work for 1984-1988 (cont.)

Project number	Project	1984	1985	1986	1987	1988
14.3.1.2.3.	Forest roads and transport of wood raw material	Seminar in late 1984 in ^{1/} on methods and techniques of forest road construction				
14.3.1.2.4.	Terrain classification from the wood harvesting point of view	Submission by team of specialists of final report to fifteenth session				
14.3.1.2.5.	Compatibility of harvesting methods and equipment with silviculture and the environment	Submission by team of specialists of progress report to fifteenth session and of the final report to seminar on mechanization of logging operations in mountainous regions				
14.3.1.2.6.	Harvesting of wood for energy purposes	Report by team of specialists on new developments to each session of the Joint Committee				
14.3.1.3.	<u>Human aspects of forest operations</u>				Seminar in ^{1/} on	Seminar in ^{1/} on
14.3.1.3.1.	General questions of vocational training in	Seminar in USA on extension services		Seminar in ^{1/} on		
14.3.1.3.2.	Specific problems of vocational training in forestry		Report to sixteenth session by team of specialists on vocational training of forest workers			
14.3.1.3.3.	General questions of applied ergonomics, safety and health in forest operations		Seminar in Finland on vocational rehabilitation and occupational health services for forest workers			
14.3.1.3.4.	Specific problems of applied ergonomics, safety and health in forest operations	Submission by team of specialists on chemicals in forestry - its terms of references and programme of work to fifteenth session		Submission by team of specialists of report on the use of chemicals in forestry to sixteenth session		
14.3.2.	Utilization of tropical hardwoods	Review in co-operation with UNCTAD and FAO				
14.3.3.	Economic and technical development in the furniture industry	Report by team of specialists on economic and technical developments in the furniture industry (to be submitted to Committee's forty-second session)				
14.3.4.	Review of progress made in the chemical processing of wood (other than for pulp and paper) and the potential of the use of wood for chemical products	Timber Committee to keep developments in the sector under review and undertake periodic surveys				

^{1/} Host country to be decided

Project number	Project	1984	1985	1986	1987	1988
	<u>WORK AREA 14.4 : ENVIRONMENTAL AND RESOURCE CONSERVATION PROBLEMS</u>					
14.4.1.	Quantification and evaluation of the environmental benefits of forests	Revision and publication of results of enquiry (linked with project 14.5.2.3.)	Review of final results of enquiry by Working Party			
14.4.2.	Energy conservation and self-sufficiency in the mechanical wood processing industries	Study by team of specialists on the technical aspects of generation of energy from wood to be submitted to Committee's forty-second session	Further work as decided by Committee			
14.4.3.	Implications of air pollution damage to forests for the forestry and forest products sector	Report to be submitted to the forty-second session of the Committee. Further activities as decided by Committee				
14.4.4.	Measures to be taken in case of sudden and severe damage to forests	Draft document compiled from information provided by countries to be submitted to the forty-second session of the Committee				
		Countries where sudden and severe damage to forest occur, should send an assessment of such damage to the secretariat for rapid circulation				
	<u>WORK AREA 14.5 : COLLECTION, EXCHANGE AND DISSEMINATION OF INFORMATION, INCLUDING IMPROVEMENT AND HARMONIZATION OF STATISTICS</u>					
14.5.1.	<u>Timber Bulletin for Europe</u>	Continuing (publication twice yearly of Bulletin and four times yearly of price supplement, preparation of country forest and forest products profiles)				
14.5.2.	Selected problems of economics and statistics of forestry and forest products	Together with projects 14.5.3. and 14.5.4., activities of the Joint FAO/ECE Working Party on Forest Economics and Statistics				
			Fifteenth session of Working Party		Sixteenth session of Working Party	
14.5.2.1.	Organization and periodicity of statistical data collection and dissemination	Continuing review at each session of Working Party;				
14.5.2.2.	Conversion factors	Four-yearly survey at fifteenth session and publication				
14.5.2.3.	Forest resource analysis	Revision and publication of results of enquiry	Review of final results of enquiry by Working Party			
14.5.2.4.	Labour statistics	Revision and publication of study on labour productivity in forestry				
14.5.2.5.	Forest fire statistics	Biennial survey for review, fifteenth session and publication		Biennial survey for review at sixteenth session and publication		
14.5.2.6.	Application of remote sensing and other new survey technology for forest management and planning		Ad hoc Meeting in Sweden (subject to confirmation) possibly in collaboration with IUFRO			
14.5.3.	Studies of selected economic problems					
14.5.3.1.	Economic aspects of the fuller use of the forest biomass		Revised report to be submitted to fifteenth session			

Tabular presentation of Timber Committee programme of work for 1984-1988 (cont.)

Project number	Project	1984	1985	1986	1987	1988
14.5.3.2.	Economic aspects of afforestation and reforestation		Revised report to be submitted to fifteenth session			
14.5.3.3.	Economic aspects of the introduction of new forest machines and equipment		Further action to be decided by fifteenth session in light of additional information received			
14.5.4.	Transfer of economic and statistical methods and experience in the forest and forest products sector	Report on methods of forest statistics production in Nordic countries to be completed and published	Working Party will keep under review possibilities for the transfer of economic and statistical methods in the forest and forest products sector			
14.5.5.	Dissemination and exchange of general information and experience	Study tour in Switzerland Publication of Timber Committee Yearbook (annual)	Study tour in ^{1/}	Study tour in ^{1/}	Study tour in ^{1/}	Study tour in ^{1/}

^{1/} Host country to be decided