



Follow-up Report to

FAO/ITTO International Expert Meeting on Forest Fire Management, March 2001

Based on the work of

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October 2001**

Acknowledgements

FAO is recognized for initiating a timely follow-up to the Expert Meeting on Forest Fires that was held in Rome, Italy, 7-9 March 2001. This report is a result of that follow-up to ensure that recommendations of the Fire Experts were given immediate attention through the development of an action plan. Also, sincere appreciation is extended to the Fire Experts who provided substantial assistance during the follow-up process by giving feedback on priorities, providing additional examples of International Fire Agreements, and furnishing other technical support.

FAO Representatives in numerous Member countries were especially helpful in quickly responding to an FAO request to identify additional International Fire Agreements that might be available. Although there were not many examples that surfaced during this country-by-country survey, the survey process served to elevate awareness of the importance of International Fire Agreements as a basis for cooperation during emergencies.

Staff at FAO Headquarters in Rome provided crucial direction, leadership, and technical support during the follow-up work that took place in June and July 2001, including Mr Sène, Ali Mekouar, Gillian Allard, and Manuel Paveri. We extend our heartfelt thanks to all of you.

As always, Graciela Andrade worked efficiently behind the scenes to make sure that numerous administrative details were handled in a timely manner. Her friendly assistance is sincerely appreciated. Also, we would like to acknowledge the helpful support of Maria Amatiste Cardelli who always ensured that all of our office needs were accommodated. In addition, we want to thank Anne Branthomme and Patrizia Pugliese for their technical support.

Executive Summary

The International Expert Meeting on Forest Fire Management, organised by FAO in cooperation with the International Tropical Timber Organisation (ITTO), was held at FAO Headquarters in Rome from 7 to 9 March 2001.

The meeting was held in follow-up to the FAO meeting on *Public Policies Affecting Forest Fires*, held in Rome in October 1998, which identified the need to develop regional and bilateral Agreements in forest fire management. In addition, the Minister of Agriculture in Greece requested FAO in late 2000 to host a meeting whereby international fire experts would explore opportunities to improve mechanisms for international cooperation in fire emergencies.

The participants at the Expert Meeting on Fire Management identified 25 Recommendations that were intended to improve fire management cooperation among countries. The recommendations were directed to FAO, ITTO, other international organizations, and national institutions¹ for future consideration and action. Participants concluded at the end of the meeting that the Recommendations should be prioritized so that an action plan could be developed. The Fifteenth Session of the Committee of Forestry (COFO) was briefed on the results of the Expert Meeting on Fire Management during their mid-March meeting in Rome. The Committee took note of the important conclusions and recommendations of the fire meeting, and urged that FAO take follow-up action to support efforts in fire management.

FAO arranged in June and July 2001 for a Legal Intern and a Fire Management Consultant to determine priority activities, acquire examples of additional International Fire Agreements, develop guidelines for the development of future bi-lateral or regional Agreements, and prepare an action plan.

There were only a few examples of International Fire Agreements available for review at the Expert Meeting on Forest Fires in March 2001. Because of the follow-up in June and July, there is now an inventory of about 14 International Fire Agreements and several annual operating plans. Additional Agreements were provided by members of FAO's International Fire Management Network (IFMN) and by FAO Representatives in Member countries.

These documents were analysed to determine similarities in content. Based on this analysis, a list of Frequently Asked Questions pertaining to Agreements was developed and circulated to the IFMN. In addition, guidance for developing Agreements was outlined to assist others with the process of Agreement formulation.

Since most of the Agreements that were analyzed documented procedures to be followed when one country provides emergency fire suppression assistance to another country, the term International Fire Agreements is used as a general descriptor in the report. Some Agreements, however, like the one between Indonesia and Malaysia, are broader in scope and pertain to overall natural disaster assistance.

An Action Plan for 19 priority recommendations was developed for consideration and future action by FAO, Member countries, and collaborating organizations.

¹ See: Report on the FAO/ITTO International Expert Meeting on Forest Fire Management, held in Rome, Italy, 7-9 March 2001. FAO, Rome.

List of Acronyms

CILSS	Permanent Interstate Committee for Drought Control in the Sahel
COFO	FAO Committee on Forestry
CPF	Collaborative Partnership on Forests
ECE	Economic Commission for Europe
FAO	Food and Agriculture Organization of the United Nations
FAQs	Frequently Asked Questions
FONP	FAOs Forestry Policy and Institutions Branch
FORM	FAOs Forest Resources Development Service
FRA	Forest Resources Assessment (coordinated by FAO)
GFMC	Global Fire Monitoring Center
IFMN	International Fire Management Network
INSARAG	UN International Search and Rescue Advisory Group
ISDR	International Strategy for Disaster Reduction
ITTO	International Tropical Timber Organization
IUCN	World Conservation Union
LEGN	FAOs Legal Department
OCHA	Organization for the Coordination of Human Affairs
OFDA	Office of Foreign Disaster Assistance (U.S.)
SADC	Southern Africa Development Community
UNEP	United Nations Environment Programme

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INTRODUCTION

The International Expert Meeting on Forest Fire Management, organised by FAO in cooperation with the International Tropical Timber Organisation (ITTO), was held at FAO Headquarters in Rome from 7 to 9 March 2001 (See Annex 1 for a list of participants).

The meeting was a follow-up to the FAO meeting on *Public Policies Affecting Forest Fires*, held in Rome in October 1998. This Public Policies meeting identified the need to develop regional and bilateral Agreements for collaboration in forest fire management, including identification of technical and financial inputs, improved sharing of information and knowledge, and support to strengthen technical cooperation among developing countries. Also, the Minister of Agriculture in Greece in late 2000 requested that FAO sponsor a meeting to explore opportunities for the development of International Fire Agreements, so that countries could better assist each other during times of fire emergencies.

The specific objectives of the March 2001 Expert Meeting were to:

- Examine the need and capacity of concerned member countries in predicting, preventing, managing and fighting forest fires.
- Identify countries that have such capacity, and the period of the year when they could put know-how and equipment at the disposal of others who might need it.
- Identify countries that could potentially utilise the capacity available with others during a relevant period of the year.
- Explore the possibility of organizing the necessary logistics and compensation in inter-country arrangements of this kind.
- Develop human resources and mechanisms needed to support cooperation in forest fire management and control, mainly at bilateral, regional and, eventually, international levels.
- Develop mechanisms for the establishment of inter-country Agreements among groups of two or more countries, aimed at coordinating efforts to establish norms and to share resources, personnel and equipment in situations of emergency.
- Help identify the role of international organizations in promoting fire management.

The participants at the Expert Meeting on Fire Management identified 25 Recommendations that were developed in response to the stated objectives listed above. The recommendations were directed to FAO, ITTO, other international organizations, and national institutions² for future consideration and action.

Participants concluded at the end of the meeting that the Recommendations should be prioritized. Although there was some concern expressed that it might be difficult to prioritize

² See: Report on the FAO/ITTO International Expert Meeting on Forest Fire Management, held in Rome, Italy, 7-9 March 2001. FAO, Rome.

the recommendations due to a variety of reasons, the Terms of Reference for the meeting follow-up clearly called for reviewing and responding to priority activities:

"Under the overall direction of the Director of the Forest Resources Division, Chiefs FORM, FONP and LEGN, and direct supervision of Senior Forestry Officer (Plantations and Protection) and Forestry Officer (Forest Protection), the consultant will review and respond to priority activities identified in the recommendations of the FAO/ITTO International Expert Meeting on Forest Fires held in Rome 7-9 March 2001."

To ensure early follow-up to the Recommendations of the Expert Meeting, FAO engaged a Legal Intern and Fire Management Consultant to work in Rome in June and July 2001. They were asked to prioritize the meeting recommendations, acquire additional Agreements, analyze the common elements of Agreements, and propose a plan of action (See Annexes 2 and 3 for their Terms of Reference). This report presents these results along with detailed supporting Annexes.

REVIEW AND ANALYSIS OF MEETING RECOMMENDATIONS

The Expert Meeting participants requested FAO, ITTO and collaborating agencies to support action as set out in the recommendations. Fire Experts at the meeting unanimously concluded before adjournment that these recommendations should be prioritized later, so that efforts could be concentrated on accomplishing the most important, or feasible, recommendations first.

Preferences were aggregated and recommendations ranked in descending order. Participants were informed of the final results. These priorities for the Meeting Recommendations reflect the preferences of the Fire Experts and may not necessarily be indicative of fire management priorities of FAO or other organizations.

Based on the above, the consultants classified and prioritised the recommendations as shown below. The corresponding recommendation number from the Report on the FAO/ITTO International Expert Meeting on Forest Fire Management, March 2001 is highlighted in each case, e.g. **Ref. 36 i**:

Cluster A:

Immediate action recommended

1. - continue to actively participate in relevant, existing initiatives and mechanisms such as the Inter-Agency Task Force Working Group on Wildland Fire of the International Strategy for Disaster Reduction (ISDR)³; the United Nations International Search and Rescue Advisory Group (INSARAG)⁴; the Joint United Nations OCHA/UNEP Environment Unit⁵. FAO should also continue collaboration with organizations such as the Global Fire Monitoring Centre (GFMC), and support the development of joint programmes. Information

³ Mandate to prevent and reduce natural disasters, including wildland fires.

⁴ Mandate to coordinate on-site response to emergencies, including wildland fires. An International Search and Rescue Convention is currently being prepared to explicitly include a wildland fire emergency component.

⁵ Mandate to coordinate international response to natural disasters, including wildland fire.

and outputs from such work should feed into fora such as FAO's Committee on Forestry (COFO), the International Tropical Timber Council (ITTC) of the ITTO, and the Collaborative Partnership on Forests (CPF)⁶ and the UN Forum on Forests (UNFF). (**ref. para 36 (i)**)

2. - intensify action to facilitate networking and collaboration between countries through identifying or creating national focal points (**ref. para 33 (i)**)

3. - support the preparation of country profiles to provide international collaborators and donors with an insight into institutional set-up and operational responsibilities of these countries at national level, as well as basic information without which outside assistance will not be effective or even possible. Aspects covered in such country profiles should include reference to: political will, governance, security, socio-economic conditions, climate, vegetation, demography, available resources in personnel, equipment, funds, information, and infrastructure (**ref. para 34 (iv)**)

4. – advise on, and support the development of emergency response agreements, bilaterally and multilaterally (at regional or global levels, as appropriate); while details of such agreements will vary depending on considerations that may vary from region to region key components should be outlined in support of such action (**ref. para 35 (i)**)

Cluster B:

Early action recommended

5. – support countries to improve capacity and capability to prepare for forest fires, with special reference to those countries that have identified gaps in attributes such as legislation, policy, planning, practices and monitoring (**ref. para 33 (iv)**)

6. – catalyze and support action through providing technical assistance and advice to member countries in the development of emergency response agreements (**ref. para 33 (v)**)

7. - strengthen human and non-staff resources to respond to increasing requests for support in forest fire management (**ref. para 33 (vi)**)

8. - establish or support the establishment or strengthening of an international forest fire information centre to facilitate the sharing of world-wide information among all partners regarding such issues as emergency response agreements, resource availability and equipment; and to help facilitate contacts at regional, eco-regional, global levels. This centre should provide real-time situation reports and information on forest fire conditions and activities. The centre should be institutionalised in order to fully realise its role. (**ref. para 34 (v)**)

9. - support activities that bring local people, professionals and policy makers together and build awareness and capacity (**ref. para 32(ii)**)

⁶ Mandate to advance implementation and monitor progress in agreed actions for sustainable forest management and to enhance international cooperation on forest-related issues, including wildland fires.

10. - provide information and technical support to enhance the sustainable management of forest resources that include fire prevention measures as an integral part of such action (**ref. para 33 (iii)**)

11. - develop a data standard within the framework of the FAO coordinated Forest Resources Assessment programme to address the requirements of national and international forest fire management reporting needs (**ref. para 34 (ii)**)

Cluster C:

Other action recommended (on a continuing basis)

It is recommended that FAO:

12. - review on-going activities in forest fire management by international and regional organisations to clarify linkages, facilitate collaboration and identify gaps. Key factors are land use policies and practices, community based fire management, knowledge management, training, public awareness, institutional arrangements (**ref. para 34 (iii)**)

13. - encourage forest fire management cooperation among countries, and catalyze and support the development of additional emergency response agreements; full use should be made of already existing regional and other mechanisms, such as those operational in the CILSS, SADC, Mediterranean, Baltic, South-East Asia, Central America, Caribbean, South America and other regions (to be identified). (**ref. para 35 (ii)**)

14. – activate a task force to track and monitor progress in the development of emergency response agreements and collaboration, and to develop a detailed action plan that defines timeframes, responsibilities and costs to implement the recommendations of the International Expert Meeting by the various international, regional and national organizations concerned (**ref. para 35 (iv)**)

15. - make information available on techniques, networks, resources, collaboration and approaches to forest fire management (**ref. para 34 (i)**)

16. - compile an inventory of existing emergency response agreements to serve as models for others. Guidelines or models should be prepared for developing such agreements and related operating plans and protocols. In this regard, it is recommended that FAO distribute a questionnaire soliciting opportunities for new agreements (**ref. para 35 (iii)**)

17.- identify and help develop funding mechanisms to encourage and underpin vigorous action that leads to the development of emergency response agreements (**ref. para 35 (v)**)

18. - establish compatible incident management organisation systems in countries to facilitate the integration of international resources; such mechanisms need to be compatible between them, but do not need to be identical (**ref. para 35 (vi)**)

19. - develop training and briefing programmes for emergency response teams, based upon on-going experiences (**ref. para 35 (ix)**)

ACTION PLAN TO IMPLEMENT RECOMMENDATIONS

Recommendation	Proposed Lead	Comments
1. Participate in the existing initiatives and mechanisms	FAO and collaborating organizations and mechanisms	<i>On-going. Includes MOU with GFMC and possible other organizations or mechanisms; and collaboration e.g. with IUCN in community involvement in forest fire management and control.</i>
2. Facilitate networking and collaboration between countries through identifying or creating national focal points	FAO	<i>Action supported by the IFMN; full use will be made of already existing networks and focal points, such as Silva Mediterranea (which has a Research Network on forest fire management)</i>
3. Develop Country Fire Profiles	FAO	<i>In collaboration with countries and GFMC, existing Profiles will be added to FAO webpage and produce new profiles</i>
4. Develop emergency response agreements bilaterally and multilaterally (at regional or global levels, as appropriate); details will vary depending on considerations that may vary from region to region	Member countries	<i>Country responsibility; to be supported by FAO and international partners, at request.</i>
5. Support countries to improve capacity and capability to prepare for forest fires, particularly in countries that have existing gaps in attributes such as laws, policy, planning, practices and monitoring.	FAO	<i>FAO Guide to forest fire management in temperate/boreal zones under preparation (2001-2001); will complement earlier guides by FAO and by ITTO which focussed on the tropics. Possibility to incorporate fire related aspects in country capacity building in general will be reviewed.</i>
6. Catalyse action and provide technical support to member countries in the development of agreements at bilateral and regional levels	FAO	<i>Work will be supported by the IFMN. Fire Agreement guidelines and examples will be added to FAO webpage.</i>
7. Strengthen staff support in Fire Management	FAO	<i>New post at FAO HQ established in 2002.</i>
8. Establish Forest Fire Information Centre	FAO	<i>Contacts to be established with existing institutions. Review under way of other in-House arrangements and collaboration. Collaboration foreseen with centres such as the GFMC.</i>
9. Support activities that bring people together to improve fire	FAO and collaborating	<i>Full use will be made of the IFMN. Organization and sponsorship of</i>

management capacity	organizations and mechanisms	<i>workshops and meetings, including a Community-based Fire Management Workshop in Africa in collaboration with IUCN, ITTO, others.</i>
10. Provide technical support to improve management of forest resources, including forest fire prevention and management as an integral component of such management	FAO	<i>Includes collaboration in the development and implementation of criteria and indicators for sustainable forest management; and the preparation of guidelines and guides. Webpages to highlight and publicise case studies on fire prevention and control, including aspects of community involvement.</i>
11. Develop data standards for fire reporting within the FRA framework	FAO	<i>Streamlining of concepts and terms underway through review/ up-dating of tri-lingual FAO Wildland Fire Management Terminology (FO Paper 30). Experts in March 2001 meeting reiterated the need for country-based, qualitative as well as quantitative data, noting the need to make allowance for the use of fire as a land clearing tool; action will be taken to review definition and inclusion of standardised parameters.</i>
12. Review and facilitate international fire management collaboration	FAO and collaborating organizations and mechanisms	<i>Country case studies underway on participatory forest fire management (FONP/FORM: Gambia, Honduras, Turkey). Collaboration, cooperation among institutes will be further streamlined based on mandates, on-going action and comparative strengths.</i>
13. Encourage forest fire management cooperation, and catalyse and support the development of new emergency response agreements	FAO and collaborating organizations and mechanisms + member countries	<i>On-going, continuing activity, closely related to (4) above.</i>
14. Task Force to monitor Progress	FAO	<i>Making full use of the IFMN, implementation of this recommendation will be further reviewed.</i>
15. Make fire management information available	FAO and collaborating organizations and mechanisms + member countries	<i>To be implemented through printed documents, CD Roms, Webpages, and joint meetings</i>

16. Compile inventory of international Forest Fire Agreements	FAO	<i>Continued expansion of coverage of inventory of Agreements; information will be assessed, stored and made available in line with (15) above.</i>
17. Identify and help develop funding mechanisms to encourage development of International Agreements.	FAO and collaborating organizations and mechanisms + member countries	<i>Country requests will be channelled or directed to appropriate funding sources, as applicable.</i>
18. Establish compatible Incident Management Systems within Regions	FAO and collaborating organizations and mechanisms + member countries	<i>Fire Suppression Guidelines to be lodged on webpage</i>
19. Develop Training for Emergency Response Teams	UN/OCHA, OFDA, FAO and collaborating organizations and mechanisms + member countries	<i>Training courses and the preparation and dissemination of training materials will be intensified and adaptation to local conditions, with dissemination of information in local languages, will be encouraged and supported.</i>

REVIEW AND ANALYSIS INFORMATION ON INTERNATIONAL FIRE AGREEMENTS

A major objective of the Expert Meeting was to review and analyze available information on formal and informal fire agreements at bilateral and multi-lateral levels. Participants wanted to develop examples and guidelines to coordinate international efforts to share resources, personnel and equipment in situations of emergency and in preparation for fire emergencies.

There are several reasons that make International Fire Agreements a useful mechanism between countries:

1. Fires from one country may threaten people and natural resources in an adjacent country.
2. Smoke from fires in one country may threaten public health, navigation, and aesthetics in an adjacent country.
3. A country may have firefighting resources depleted in drought years, requiring assistance from another country.
4. Agreements may ensure a more proactive sharing of information across borders during fire seasons.

Inventory of Fire Agreements

At the Expert Meeting on Forest Fires in March 2001 examples of International Fire Agreements for Canada, the United States, Mexico, Australia, and New Zealand were presented and discussed. A letter in English, French, and Spanish was sent by fax in June to over 70 FAO Country Representatives requesting that they submit additional International Agreements that were available. Members of the Fire Management Network also were asked to send examples of International Fire Agreements to FAO. These requests resulted in the identification and collection of the following Agreements (Annex 4):

- France-Spain, 1959
- Chile-Argentina, 1967
- Spain-Morocco, 1987
- Spain-Portugal, 1992
- Chile-Argentina, 1997
- US-Canada, 1998
- US-Mexico, 1999
- US-Australia, New-Zealand, 2000
- Russian Federation-Mongolia, 2001
- US-New Zealand, 2001
- Indonesia-Malaysia, 2001
- China-Russia, 1995
- British Columbia, Canada-Ghana (Technical Assistance), 1999
- Costa Rica-Nicaragua, date unknown

Also, included in the inventory are examples of Annual Operating Plans/Operational Guidelines between Canada and the United States, and Mexico and the United States. The Operating Plans are more site specific and contain procedural details not contained in the overall Agreements.

After reviewing the documents, a matrix for the Agreements and a matrix for the Annual Operating Plans/Operational Guidelines were completed to show the common and different elements in detail. Two additional matrixes were prepared showing an overview of the elements (Annexes 10 and 11).

With the help of this detailed analysis, a list of FAQs (Frequently Asked Questions) was compiled with answers (Annex 5). This list gives countries considering the possibility to enter into such agreements new ideas and reminds them of the most important elements.

Guidelines for Developing Agreements

Country requirements will determine which topics are finally included in an International Agreement. But it is recommended that the following topics be considered for inclusion in Bi-Lateral or Multi-Lateral Fire Agreements:

- 1) Parties to the Agreement
- 2) Purpose of the Agreement
 - a) mutual assistance in prevention, presuppression and control
 - b) potentially only in especially defined zone

- 3) Definitions of technical terms
- 4) Executive organizations or officials
- 5) General Obligations
 - a) to render assistance
 - b) coordination of work
 - c) standard of personnel
 - d) medical aid for injured personnel
 - e) safety equipment
 - f) information exchange
 - g) provision for annual operating plans/operational guidelines
 - h) provision for authorised burning
- 6) Reimbursement of costs
 - a) burden of reimbursement
 - i) for personnel
 - ii) for equipment
 - b) potential exemption from reimbursement
 - c) reimbursement procedures
- 7) Liabilities
 - a) cross-waiver of claims/exemption from liability
 - b) exceptions to cross-waiver of claims
 - c) damage to third persons
 - d) liability of officer responsible for equipment
 - e) privileges and immunities
- 8) Operating Plan/Operational Guidelines
 - a) authority to develop plan/guidelines
 - b) purpose
 - c) review
 - d) content
 - e) register of all existing plans/guidelines
- 9) Customs provisions
 - a) simplification of border transfer
 - b) concerning personnel
 - c) concerning equipment
 - d) concerning aircraft
 - e) concerning officer responsible for equipment
- 10) Other Provisions
 - a) implementation of Agreement
 - b) personnel matters
 - c) equipment and aircraft
 - d) recall of firefighting resources
 - e) other areas of cooperation
 - f) policies

- g) general management of assistance
- h) prohibition of fire in certain period of the year
- i) observation points
- j) dispute settlement
- k) relation with other agreements
- l) military involvement
- m) annual review and amendments
- n) billing and payment
- o) fiscal provisions
- p) funds

11) Duration/Termination

- a) duration
- b) termination

REVIEW AND DEVELOP FOREST FIRE DATA BASE

The International Fire Management Network was asked to review and further develop the forest fire reporting database available on the FAO Forest Resources Assessment Programme Webpage, including the identification of additional fire management information proposed to be included in the country profiles. The existing Country Profile for Fire Management was sent to all Network members for comment.

Since no additional comments were received, the following Country Profile format used in FRA 2000 is recommended as the template to be used in the future:

Forest Fire situation in: (name of country)

Please complete the following information about forest fires and how they are managed. A summary page, using this information, will be included in the FAO Forestry web site. For an example, please see http://www.fao.org/forestry/fo/country/is.jsp?lang_id=1&geo_id=99&page_id=1179.

1. Fire environment, fire regimes and the ecological role of fire

In addition to a narrative summary, include the national definition of what constitutes a "forest fire".

2. Narrative summary of major wildfire impacts on people, property, and natural resources that occurred historically

3. Narrative summary of major wildfire impacts on people, property, and natural resources during the 1990's

4. Fire management organization

5. Wildfire database

Year	Total No. of Fires on Forest, Other Wooded Land, & Other Land No.	Total Area Burned on Forest, Other Wooded Land, & Other Land ha	Area of Forest Burned ha	Area of Other Wooded Land and Other Land Burned ha	Human Causes No.	Natural Causes No.	Unknown Causes No.
1990							
1991							
1992							
1993							
1994							
1995							
1996							
1997							
1998							
1999							

Record data for all wildfires, or any fire occurring on wildland except a fire under prescription.

Note: This table needs to be completed only by those countries which do not report annual data on fires using the UN-ECE/FAO/Commission of European Communities questionnaire on forest fires.

Definitions:

Forest: Land with tree crown cover of more than 10 percent and area of more than 0.5 hectares. The trees should be able to reach a minimum height of 5 meters at maturity.

Other wooded land: Land either with a crown cover of 5-10 percent of trees able to reach a height of 5 meters at maturity; or a crown cover of more than 10 percent of trees not able to reach a height of 5 meters at maturity; or with shrub or bush cover of more than 10 percent.

Other land: Land with less crown cover, tree height, or shrub cover than defined under "Other wooded land". Indicate if recurring wildfires affect "Other land" by inhibiting regeneration to the "Forest" and "Other wooded land" categories.

Date: _____

Source of information: _____

Country correspondent: _____

E-mail address of correspondent: _____

Is fire database management by computer or by paper records: _____.

Address of website to access the fire database, if available: _____.

6. Use of prescribed fire to achieve resource management objectives

7. Public policies and relevant laws and agreements affecting wildfires and fire management**8. Sustainable land use practices used to reduce wildfire hazards and wildfire risks****9. Community involvement in fire management activities****FAO FIRE MANAGEMENT WEBPAGE**

To support the dissemination of available national forest fire information as well as fire management guidance, the consultants were requested to prepare a draft layout for an updated FAO Forest Fire Management Webpage. The following Webpage format was discussed and agreed upon, in principle, at the de-briefing at FAO on 19 July 2001:

DRAFT WEB-PAGE

(to be posted in the official languages of FAO, initially, in English, French and Spanish)

Forestry Forêts Montes**FAO, Forests and Fire**

<http://www.fao.org/Forestry/fonp/fire/default.stm>

Fire has been a major influence on the development of many of the world's forests and on their management. Some forest ecosystems have evolved in response to frequent fire and are adapted to recurring fires in beneficial ways. But many forests are susceptible to the negative impacts of wildfires. Every year millions of hectares of the world's forests are burned by wildfires, resulting in enormous losses to people, property, and natural resources. Costs of fire suppression have been increasing and there has been a deplorable loss of life associated with many of these fires.

The vast majority of fires in forests and woodlands are caused by people, mainly as the result of using fire as a land management tool to convert forests into agricultural land, for converting forests to grazing land, for maintaining existing grazing lands, for converting forest lands to other purposes, and for facilitating the extraction of non-wood forest products. Fire also is used by resource management agencies to reduce the fire hazard in high priority areas, achieve silvicultural objectives, improve wildlife habitat, and to perpetuate natural ecosystems in national parks and wildernesses. Also, many wildfires result from the careless use of fire, human carelessness, negligence, and arson.

Although fire can degrade forests and lead to de-forestation, as an important ecosystem process it has a role to play in the health and maintenance of fire-adapted ecosystems. Thus, the traditional view in many societies of fire as a destructive agent requiring immediate suppression should be counter-balanced by the knowledge that fire can be used to meet land and resource management goals and objectives under specific ecological conditions.

FAO acknowledges that fire management is an integral part of the conservation and sustainable management of forests, and that the participation of local people in the planning and execution of fire management programmes is essential. For more than 50 years, FAO has provided information and technical assistance to its member countries in the area of forest fire management.

The following Webpage links provide access to important fire management elements:

[More information on the FAO programme on fire management](#)

[The FAO Meeting on Public Policies Affecting Forest Fires](#)

[Wildland Fire Management Terminology](#)

[Global Fire Assessment: 1990-2000](#)

[Country Fire Profiles](#)

[International Fire Agreements](#)

[FAO PROGRAMME ON FIRE MANAGEMENT](#)

[Guidelines for Community Participation in Fire Management](#)

[Guidelines for Implementing a Fire Prevention and Awareness Campaign](#)

[Guidelines for Strengthening Fire Suppression Capacity](#)

[Guidelines for Developing an Incident Command System for Firefighting](#)

[Publications](#)

[INTERNATIONAL FIRE AGREEMENTS](#)

[Frequently Asked Questions](#)

[An Inventory of International Fire Agreements and Operating Plans](#)

[Sample Agreement Between Spain and Morocco](#)

[Sample Agreement Between Chile and Argentina](#)

[Sample Agreement Between Canada and the United States](#)

[Sample Operating Plan Between Canada and the United States](#)

[Sample Agreement Between Mexico and the United States](#)

[Guidelines for Preparing International Fire Agreements](#)

CONSULTATION WITH THE INTERNATIONAL FOREST FIRE MANAGEMENT NETWORK

During the follow-up work to the Expert Meeting on Forest Fires, the International Consultant and the Legal Intern contacted the fire experts of the International Fire Management Network and invited their inputs and feedback regarding agreements, Country Profile format, and the FAO Webpage. Several additional International Fire Agreements were made available due to the efforts of network members.

In consultation with these experts and related international, regional and national institutes, additional members to the IFMN were proposed and a new mailing list was developed (Annex 6). The IFMN should be kept at an informal level to help ensure the spontaneity of responses and communications. One IFMN member suggested that it would be valuable for FAO to send out a brief bi-monthly newsletter to inform network members of developments and initiatives. Of course, network members also are encouraged to share fire information of general interest with others as was done with the Press Releases for the "Communities in Flames" Workshop that took place in Indonesia in July 2001.

UN OFFICE FOR THE COORDINATION OF HUMANITARIAN AFFAIRS (OCHA)

Mr. Vladimir Sakharov, Chief, Environmental Emergency Section, Emergency Services Branch, UN Office for the Coordination of Humanitarian Affairs (OCHA), Geneva, provided a briefing to the Fire Management Consultant on 10 July 2001 in Geneva, Switzerland, on the functioning of UN/OCHA and its possible roles in follow-up action. A summary of this briefing is given in Annex 7.

A briefing also was provided by Kit Prins and Jorge Najera in Geneva regarding their role in collecting wildfire data for industrialised countries under the auspices of the United Nations Economic Commission for Europe.

GLOBAL FIRE MONITORING CENTER (GFMC)

Johann Goldammer and staff at the Global Fire Monitoring Center, Freiburg University, Germany, provided a briefing for the Fire Management Consultant on 12-13 July 2001 (See Annex 7). Operations of the Center in monitoring and recording the status of global wildland fires were described. One result of this visit to the GFMC was the drafting of a formal Agreement to strengthen cooperation between FAO and GFMC (See Annex 9).

CONCLUSIONS

Fire management specialists and researchers from Asia, Africa, Europe, North America, and South America, along with FAO Staff, identified 25 recommendations to strengthen international fire management programmes at a meeting sponsored by FAO in Rome, Italy, 7-9 March 2001. Not surprisingly, several of these recommendations emphasized the importance of International Fire Agreements, so that countries would be in a better position to assist each other during times of wildfire emergencies. Also, other recommendations encouraged the support of existing global fire management initiatives and called for mechanisms to better share information. FAO established the International Fire Management Network (IFMN) after the March meeting as a way to continue on-going communications among the fire experts regarding key fire issues.

In a follow-up to the Expert Fire Meeting of March 2001, the IFMN was asked to prioritize the Recommendations, so that an Action Plan could be developed that focused on the higher priority activities. The Action Plan specifies 19 priority activities for consideration and future action by FAO, Member countries, and collaborating agencies. The strategy of sharing the responsibility of implementing recommendations among all partners is an important one. The burden of implementation should not fall only on FAO.

Although only a few International Fire Agreements were identified at the Expert Meeting in March, additional efforts during the follow-up period have located about 14 Agreements and several Operating Plans. Most of these International Fire Agreement examples are bi-lateral in scope, although there could also be a substantial benefit to countries in developing multi-lateral or regional Agreements in the future.

FAO's available database of existing Agreements provides a technical and legal basis for other countries to use as examples in developing new Agreements. As Australia, Canada, New Zealand, and the United States discovered during the 2000 fire season, the existence of completed Agreements greatly facilitated and expedited the development of new Agreements. Having model Agreements available allowed these four countries to complete a new multi-lateral Agreement in about a week's time. It will be important to actively share these model Agreements and guidelines through webpages and other means in order to benefit additional countries. Although a brief guideline was prepared for developing new Agreements, this is an area that would benefit from additional work. FAO could also pursue the use of Trust Funds in supporting the development of Agreements.

The most crucial time to implement International Fire Agreements is often during periods of drought when neighbouring countries may each be experiencing severe burning conditions and many wildfires. Responding to border fires under the guidelines found in Agreements can provide more timely suppression actions, reducing the size and costs of the fires. Some countries have discovered that they can offer assistance to other countries even when they are responding to critical domestic fires. Of course, countries in the Southern Hemisphere like Australia and New Zealand are in a position to respond easily to fires in the Northern Hemisphere where the fire seasons are reversed. The converse deployment of resources from the Northern to the Southern Hemisphere also is feasible for the same reason.

It should also be noted that internal Agreements among agencies within a single country can be extremely useful in better responding to wildfires. For example, the wildfire organization can be strengthened through Agreements with the weather service, military, and other wildland fire suppression organizations so that additional services and resources are available.

It was obvious in meeting with OCHA and GFMC personnel that there is close coordination between these two entities in regularly documenting the status of emerging international wildfire emergencies. Rather than duplicate these important services elsewhere, it appears that the more efficient approach would be in supporting these efforts in ways to ensure maximum effectiveness. FAO already is taking steps to provide closer information sharing and cooperation with these organizations.

It was apparent during the follow-up to the Expert Meeting that the IFMN was very useful to FAO in providing timely information and technical advice. Steps should be taken to maintain the IFMN as a vital consulting group for on-going fire management initiatives undertaken by FAO.

**FAO/ITTO INTERNATIONAL EXPERT MEETING ON
FOREST FIRE MANAGEMENT
7-9 March 2001**

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⁸ A number of other colleagues from the Forestry Department attended the Opening and part of the sessions of the meeting.

TERMS OF REFERENCE FOR FIRE MANAGEMENT CONSULTANT

- (1) Review and further refine the *Provisional Action Plan and Schedule for Implementation of Recommendations*; and the chart of *Fire Seasons in Different Countries*, prepared following the Expert Meeting.
- (2) Review and analyze available information on formal and informal agreements at bilateral, regional and international levels, aimed at coordinating efforts and share resources, personnel and equipment in situations of emergency and in preparation of such events. Document and summarize related information. Prepare draft guidelines in the form of a checklist for developing such agreements and related operating plans and protocols.
- (3) Review and further develop the forest fire reporting database available on the Forest Resources Assessment Programme Web-page, including the identification of additional fire management information proposed to be included in the country profiles. Prepare a draft layout for an FAO Forest Wildfire Management Web-page.
- (4) Contact members/experts in the incipient Fire Management Network (FMN) and seek their inputs into (1)-(3) above. In consultation with these experts and related international, regional and national institutes, propose additional members to the FMN and preliminarily approach these. Prepare a mailing list for future communications. Consult the FMN members and other relevant sources regarding possible country focal points.
- (5) Identify programme areas and projects for possible outside support, prepare draft project outlines and project ideas, as applicable.
- (6) Prepare a summary report on findings, annexing lists of fire management network members and country focal points, as well as a list of present and potential international partners and their main mandates.

TERMS OF REFERENCE FOR LEGAL INTERN

During the International Expert Meeting on Forest Fire Management, the experts recognised the fundamental requirement for effective sustainable forest and land management policies and practices. To achieve this objective, an overriding priority was the establishment of agreements for mutual assistance in preparation for and emergency response to fire events, in order to better share international fire management resources, knowledge and understanding.

Widespread emergencies in recent years in all regions of the world have underscored the importance of having fire management cooperation arrangements on mutual assistance and emergency response established in advance of fires, thus this internship will investigate the legal side of this procedure.

Tasks

Under the direct supervision and guidance of the Chief of Forest Policy and Institutions Branch, Forestry Department and Senior Legal Officer, Development Law Service, Legal Office, and in consultation with Chief Forest Resources Development Services, Forestry Department, the Legal Intern will work closely with the International Consultant, Mr Robert Mutch (whose TORs are attached), and will carry out the following tasks:

- Acquaint herself with legal and technical aspects of forest fire management, including related legal and institutional frameworks.
- Contribute to the collection and review of the emergency response agreements to be inventoried by the International Consultant, with a view to categorizing them as well as identifying and describing their main common elements.
- Based on this inventory and analysis of emergency response agreements, contribute to the preparation of guidelines or models to be used for developing such agreements and related operating plans and protocols for interested countries.
- Contribute to the preparation of a questionnaire soliciting opportunities for developing new emergency response agreements, taking account of OCHA's "Environmental Emergency Notification" questionnaire, as appropriate.

To achieve the above tasks, the intern will review and, where appropriate, make use of the following:

- Existing mechanisms for the establishment of agreements among groups of two or more countries aimed at coordinating efforts to establish norms and to share resources, personnel and equipment in situations of emergency.
- Regional and global agreements that are relevant to forest fire management, in such regions or under such institutions as CILSS, SADC, Mediterranean, Baltic, Southeast Asia, Central America, Caribbean, South America.
- Existing national and sub-national legislation on forest fire management.

INVENTORY OF AGREEMENTS

I. International (bi- and multilateral) Agreements

A. Convenio de 14 de julio de 1959 de asistencia mutua entre servicios contra incendios y de socorro franceses y españoles (Agreement of July 14, 1959, about mutual assistance between French and Spanish firefighting services).

B. Convenio sobre resguardo de bosques fronterizos contra incendios, Santiago, 5 de abril de 1967 (Agreement about the prevention of border forests against fires, Santiago, April 5, 1967).

C. Convenio sobre cooperación técnica y asistencia mutua en materia de protección civil entre el Reino de España y el Reino de Marruecos, firmado en Rabat el 21 de enero de 1987 (Agreement about technical cooperation and mutual assistance in the field of civil protection, between Spain and Morocco, signed in Rabat on January 21, 1987).

D. Protocolo entre el Reino de España y la República Portuguesa sobre cooperación técnica y asistencia mutua en materia de protección civil, hecho en Evora el 9 de marzo de 1992 (Agreement between Spain and Portugal about technical cooperation and mutual assistance in the field of civil protection, Evora, March 9, 1992).

E. Acuerdo entre la República Argentina y la República de Chile sobre cooperación en materia de catástrofes, Santiago, Chile 8 de agosto de 1997 (Agreement between Argentina and Chile about cooperation in the field of catastrophes, Santiago, Chile, August 8, 1997).

F. The Northwest Wildland Fire Protection Agreement, (US-Canadian, States, Provinces, Territories) PUBLIC LAW 105-377, Nov. 12, 1998.

G. Wildfire Protection Agreement between the Department of the Interior and the Department of Agriculture of the United States of America and the Secretariat of Environment, Natural Resources, and Fisheries of the United Mexican States for the Common Border, June 4, 1999.

H. International Agreement between USA and ANZ, August 2000, FS Agreement No. 0011130200-0148, BLM Agreement No. 1422RAA00-0001.

I. Agreement on Cooperation for Forest and Steppe Fire Protection between Russian Federation and Mongolia, 2001.

J. Wildfire Arrangement between the Department of the Interior and the Department of Agriculture of the United States of America and the National Rural Fire Authority of New Zealand, 2001.

K. International Agreement for Technical Fire Cooperation between British Columbia, Canada, and Ghana, 1999.

L. Cooperation and Assistance on Natural Disaster Management between Malaysia and Indonesia, 2001.

M. International Agreement between Nicaragua and Costa Rica, date unknown.

N. The Agreement of Joint Control of Forest Fire Between the Government of the People's Republic of China and the Government of Russian Federation, 1995.

II. Operating Plans/Operational Guidelines

A. Northwest Wildland Fire Protection Agreement (Northwest Compact), Cooperative Operating Plan 2000 (May 5, 2000).

B. Mexico/United States Wildfire Protection Agreement, Operational Guidelines for 2000.

C. Canada/United States Reciprocal Forest Fire Fighting Arrangement, Operational Guidelines for 2001 (January 15, 2001).

D. Northwest Wildland Fire Protection Agreement (Northwest Compact), Cooperative Operating Plan 2001 (May 5, 2001).

III. In-Country Agreements

A. Convenio de coordinación en la prevención y combate de incendios forestales, 23 de Febrero de 1998 (Chile).

B. Acuerdo de colaboración palena protección conjunta para la zona limítrofe de las regiones X – los lagos Y XI – Aysen, La Junta, Noviembre 1998 (Chile).

C. Convenio de colaboración para la protección contra incendios forestales entre la Corporación Nacional Forestal VII región y Forestal Celco S. A., 01 de Diciembre de 1999 (Chile).

IV. Negative Responses

A formal request was sent out to FAO Representatives located in many countries throughout the world asking them to identify those countries that had entered into International Fire Agreements with other countries. The FAO Representatives contacted the appropriate Ministries and reported back to FAO regarding the absence of such Agreements for emergency fire assistance in the following countries:

The Bahamas

Benin

Bolivia

Brazil (Technical Fire Management Agreement with the United States, but no agreements regarding emergency responses to wildfires)

Cambodia
Caribbean Islands
Cyprus
El Salvador
Eritrea
Ethiopia
Guatemala
Laos
Lebanon
Nigeria
Peru
Rwanda
Sierra Leone
Senegal has no Agreements with other countries, but has plans to develop Agreements with the Gambia, Guinea-Bissau, and Guinea Conakry
Syria
Thailand
Togo
Uruguay
Venezuela
Zambia

FREQUENTLY ASKED QUESTIONS REGARDING INTERNATIONAL (BI- AND MULTILATERAL) FIRE AGREEMENTS

The frequently found provisions to the frequently asked questions presented below have to be considered as examples and propositions. They are mainly based on review of some already existing Agreements⁹ and on practical experience.

General legal considerations

1. What is the procedure of entering into Agreements concerning forest firefighting?

This depends very much on the procedure required by the Constitution of the individual countries.

In the United States, for instance, the responsible legislative body has to pass a law authorising the development of Agreements concerning forest firefighting.¹⁰

Then the authorised organisation will develop the Agreement.

In other countries, the Constitution may have a provision that permits specified organisations to enter into Agreements in general; afterwards ratification by Parliament may be required.

2. What is considered to be the main purpose of such an Agreement?

The main purpose of an Agreement concerning forest firefighting will be to promote effective prevention, presuppression and control of forest fires by providing mutual aid (B, Art. 1). The Agreement will provide a framework within which one Party may request and receive forest firefighting resources from the other Party (C, Art. I, 1).

3. Once in effect, does the Agreement bind one party to help the other in an emergency or is it optional?

Generally, when the Parties enter into an Agreement, they agree to be legally

⁹ *In the following, reference will be made to the listed Agreements and Operating Plans/Guidelines:*

(A) Wildfire Protection Agreement between the Department of the Interior and the Department of Agriculture of the United States of America and the Secretariat of Environment, Natural Resources, and Fisheries of the United Mexican States for the Common Border; June 4, 1999

(B) The Northwest Wildland Fire Protection Agreement, PUBLIC LAW 105-377, Nov. 12, 1998

(C) Wildfire Arrangement between the Department of the Interior and the Department of Agriculture of the United States of America and the National Rural Fire Authority of New Zealand

(D) International Agreement Between USA and ANZ, August 2000, FS Agreement No. 0011130200-0148, BLM Agreement No. 1422RAA00-0001

(E) Canada/United States Reciprocal Forest Fire Fighting Arrangement, Operational Guidelines for 2001, January 15, 2001-06-26

(F) Northwest Wildland fire Protection Agreement (Northwest Compact), Cooperative Operating Plan 2000

(G) Mexico/United States Wildfire Protection Agreement, Operational Guidelines, 2000.

¹⁰ *See: the "Wildfire Suppression Assistance Act"; PUBLIC LAW 101-11, Apr. 7, 1989 in connection with the "Temporary Emergency Wildfire Suppression Act"; PUBLIC LAW 100-428, Sept. 9, 1988.*

obligated to render assistance under the circumstances specified in the Agreement and clarified in the Annual Operating Plan/Annual Operational Guidelines, when an Annual Plan exists (see below). Nevertheless, there might be the right to consider whether in the actual case, it is possible to render the requested aid (B, Art. V) (C, Art. III, 1), or whether the Sending Party might need its own resources at home. The right to the withdrawal of resources in appropriate circumstances is usually covered in the Agreement (see below) (C, Art. III, 6) (E, Art. III, E) (F, Art. IV, E).

4. Which criteria can be used when competition for resources between the Parties arises?
The following standard criteria can be used to decide whether to provide requested aid and equipment or whether to keep it at home:

- *Potential to destroy:*
 - *human life*
 - *property and resource values*
- *Social/political, economic concerns*
- *Questions to guide decision making:*
 - *Is the wildfire an immediate threat to the Sending Party's resources?*
 - *Will the international mobilisation adversely affect the agency's ability to respond to a domestic incident/emergency?*
 - *Will the wildfire assignment involve significant health and safety threats to Sending Party's personnel?*
 - *Will large numbers of personnel be requested for a long duration assignment?*
(G, Art. III).

5. Do new Agreements have any impact on already existing Agreements?
Generally, a new Agreement will not prejudice rights and obligations of the Parties under other bilateral and multilateral agreements (A, Art. IX) (B, Art. VIII).

6. What happens if a dispute arises between the Parties?
Disputes concerning interpretation or application of provisions of the Agreement or of the Annual Operating Plan will be resolved by the Parties by means of discussions, negotiations and consultations (A, Art. X) (C, Art. XI).

7. How long will the Agreement remain in force?
Generally, but not always, the Parties will make a provision indicating an explicit termination date. The Agreement can either continue in force for each Party until such Party takes action to withdraw therefrom (B, Art. X), or the Parties can fix a date (e.g. five or ten years after entering into force), when the Agreement shall terminate (A, Art. XI, 1) (D, Art. X, 4). The Parties can also provide that the Agreement shall continue after the first term from year to year unless it is terminated (C, art. XII, 3).

8. Can the Agreement be terminated before the established termination date?
Generally, the Agreement can be terminated earlier. But the terminating Party has to provide the other Party with reasonable, written notice (C, Art. XII, 3). It might be necessary to give the notice a certain period before the Agreement can be actually terminated (e.g. six month) (A, Art. XI, 3).

9. What is an Annual Operating Plan? And what is the difference between an Agreement and an Annual Operating Plan?

An Annual Operation Plan is an accord concluded under an existing Agreement between the authorised officials of the Parties to that Agreement and having its authority in the latter. Whereas the enabling Agreement deals with more general issues and designates the basic lines of mutual assistance, the Annual Operating Plan specifies more practical subjects and technical details. Thus, it contains among others the appropriate methods of reimbursement, how to request other Party's resources, the names of officials to be contacted, a clear structure of delegation of authority, logistical matters, etc. The Annual Operating Plan has to be developed, as its name indicates, year by year. The enabling Agreement may be in force for a certain period of time, or indefinitely. It can be prescribed to review the enabling Agreement annually, but this is not necessarily the case.

10. Is it imperative to develop Annual Operating Plans?

This depends on the provisions of the enabling Agreement. This can prescribe the development of an Annual Operating Plan (A, Art. III) (C, Art. VII, 1), or it can leave the matter to be decided by the Parties (B, Art. III). Nevertheless, the development of Annual Operating Plans will generally be recommended to generate a more efficient collaboration in firefighting.

11. Which aspects need to be covered by the Annual Operating Plan?

It is recommended to cover the following aspects, each one to the extent required by the Parties to the Agreement. It is important to remember that the Operating Plan should have concrete practical and technical procedures.

- *Definition of terms*
- *Delegated responsibilities (name responsible officials)*
- *Measures to approve request*
- *Resources (identify resources available)*
- *Provide for information exchange between points of contact*
- *Provide for information exchange on actual fire occurrences*
- *Customs (measures to provide for expeditious cross-border movement)*
- *Reimbursement*
- *Liabilities*
- *Fiscal procedures*

12. Is it necessary to develop Regional/Local Operating Plans in addition to the general Annual Operating Plan?

This may depend on the area covered by the Agreement and on the extent the general Operating Plan goes into detail. When the latter generates efficient collaboration, Regional/Local Operating Plans might be superfluous. Otherwise, especially when the area covered by the Agreement is quite large, Regional/Local Operating Plans might facilitate collaboration because the Plan is closer to the people who actually work under it. For example there are three Regional Operating Plans along the international border between Canada and the United States.

13. Do any general standards exist, serving as a common base of understanding, concerning vocabulary, standards of equipment and personnel?

To avoid misunderstandings and difficulties in collaboration the Parties can give definitions of specific vocabulary in the beginning of the Agreement (A, Art. II) (C, Art. II).

Alternatively, they can make reference to the “FAO Forestry Paper 70, Wildland fire management terminology” (updating currently in process).

Concerning standards of equipment and personnel no general standards exist. It seems to be important, that standards should, as far as possible, meet the Receiving Party’s conditions and needs.

It could be specified that the Receiving Party will send documentation outlining the major requirements of the position requested and that the Sending Party will certify that personnel sent will meet the requirements (E, Art. III, B, 5) (F, Art. IV, B, 4) (G, Art. III, D, 4).

With regard to aircraft, Parties could agree that all aircraft will meet the Receiving Parties specifications for standards and pilot qualifications and that those will be inspected prior to being put into service (E, Art. III, D, 4) (G, Art. III, G, part 2, 6).

14. Is it possible to withdraw the resources once sent to the Receiving Party?

It is possible to recall the resources from the Receiving Party. A certain time before actual withdrawal, e.g. 24 or 48 hours, notice should be given by Sending Party to Receiving Party wherever possible (C, Art. III, 6) (E, Art. III, E) (F, Art. IV, E, 1), and then the Receiving Party should make every effort to send back the withdrawn resources as quickly as possible (F, Art. IV, E, 2).

15. Who has to provide for safety equipment?

The Sending Party provides all the safety equipment required to meeting their regulations; should additional equipment be required by the Receiving Party, the Receiving Party supplies at their expense (E, Art. III, B, 12) (F, Art. IV, B, 3) (G, Art. III, D, 5).

16. Who has to bear the costs of the Sending Party’s firefighting resources?

In general, the Sending Party will be reimbursed by the Receiving Party for the expenses resulting from the firefighting assistance. But this is not necessarily the case. Where it seems appropriate, the Agreement or the Annual Operating Plan should contain different provisions for reimbursement. There are instances where the Sending Party may pay for the resources being sent to the Receiving Party.

17. Who will have the responsibility for overall coordination?

The Parties to the Agreement could decide to delegate overall coordination to one specified State organisation of one of the Parties.

18. Which will be the authorised organisation to request assistance?

The authorised agencies will be named generally in the Annual Operating Plan or in the Agreement (D, Art. X) (E, Art. III, A, 1, 2) (G, Art. III, B). The agencies of one Party should provide the other Party with the names and phone numbers of the authorised State’s officials at an appointed day of the year (E, Art. III, A, 3) (F, Art IV, A, 2) (G, Art. III, B).

19. What is the best way to deal efficiently with customs’ regulations?

To minimise delays at border crossings for Customs and Immigration clearances, the indicated agency of the assisting State should supply to the Customs Point of Entry, along with all transport and arrival information, in the form specified, (e.g. 24 hours prior to mobilisation) containing but not limited to the following items:

- *Personnel: The Full Name, Citizenship, Date and Country of Birth, Home Base and Departure Point*

- *Equipment: The Item, Quantity and Serial or Identification Numbers, Carrier and Bill of Lading Number, Country of Manufacturing*
- *Aircraft: The Registration, Tail Number, Call Sign, Aircraft type, Flight Crew Information (same as personnel) and Vendor (E, Art. III, A, 5) (G, Art. III, C).*

Resources travelling through non-port of entries, i.e., firefighters, should have pre-season clearance through local State Customs and Immigration. Custom Declaration forms have to be completed for presentation to Customs at Point of Entry (E, Art. III, A, 6).

20. Which logistical matters should be covered by the Agreement or by the Annual Operating Plan?

Following logistical matters should be covered:

- *Entry of personnel and equipment*
- *Briefing of personnel*
- *Pre-travel information*
- *Accommodation and catering*
- *Acclimatisation*
- *Cargo*
- *Length of assignment and rest and rotation for personnel*

21. Who will provide medical assistance?

The Receiving Party ensures that immediate medical services are afforded to any member of the incoming forces regardless of the nature of the requirement or the type of medical aid required (E, Art. III, B, 13) (F, Art. IV, B, 7). Costs for medical services should be covered by the Receiving Party until the employee is returned to the fireline or to Sending Party (E, Art. III, B, 13). Alternatively, the Sending Party could ensure that their personnel are adequately covered for any hospital and/or medical costs incurred while on assignment (F, Art. IV, B, 7).

22. Can the Sending Parties personnel be sued for any action taken while performing duties under the Agreement?

There should be no liability if the action is taken pursuant to the Agreement (B, Art. 6). Otherwise, the Sending Party might hesitate to render assistance.

23. Is one Party liable towards the other for loss, damage, personal injury, or death?

Each Party should waive its claims against the other Party for compensation for loss, damage, personal injury, or death occurring as a consequence of the performance of the Agreement or of activities undertaken pursuant to the Annual Operating Plan (A, Art. 5) (C, Art. V, 1). The cross-waiver of liability should not apply to claims arising from wilful misconduct or criminal conduct (A, Art. 5).

24. Is the Receiving Party liable for damages or destruction of the firefighting equipment?

The costs of refurbishing are reimbursable by the Receiving Party unless the Sending Party agrees that the receiving agency will perform the work. In the event that any equipment or supplies are damaged beyond repair or not returned, they have either to be replaced by the Receiving Party with new equipment or supplies of the same quantity and to the Sending Party's standards, or full replacement cost has to be reimbursed by the Receiving Party (E, Art. III, C, 2, 3) (F, Art. IV, C, 2, 3) (G, Art. III, F, 2, 3). Further, the Agreement might provide that, unless otherwise agreed upon between the Parties, maintenance and damage to a Sending Party's aircraft is the responsibility of the

contractor or owner, and is not reimbursable. Damage to an aircraft caused as a direct result of Party's personnel actions are the Receiving Party's responsibility and are reimbursable (E, Art. III, E, 1) (F, Art. IV, D, 3, 5) (G, Art. III, G, part 2, 1, 2, 3, 4).

25. Can Agreements be used to facilitate other than emergency responses?

An Agreement can be used to encourage and strengthen other cooperative fire management activities, through sharing among the Parties, fire management techniques, skills, and innovations. The Agreement may explicitly provide for a regular exchange in non-emergency situations (e.g. of senior fire and aviation management officials, as well as firefighting personnel, operational staff and specialists). For that purpose, reciprocal Personnel Exchange Protocols might be developed that provide the guidelines for the initiation, implementation and reporting of exchange programs by individuals from participating agencies and countries.

26. How can international assistance be requested when no formal Agreement exists?

A State seeking international assistance in forest firefighting can make a request to OCHA (Organization for the Coordination of Human Affairs). A special form has to be compiled and sent to OCHA, which will try to send the aid requested. Similar mechanisms of assistance can be requested from international aid organisations. Further, assistance could also be requested from other countries on a bilateral basis.

IFMN E-Mail Mailing List

This mailing list can be copied and pasted into the heading of an e-mail message:

pbalatso@yahoo.com; vocedeno@semarnap.gob.mx; itto@itto.or.jp; jggold@uni-freiburg.de;
johan@ffa.co.za; apk@ogm.gov.tr; pmoore@cgiar.org; shams@frim.gov.my;
bobmutch@montana.com; div12@corpoforestale.it; psanhuez@conaf.cl;
ricks@calm.wa.gov.au; rvsoares@floresta.ufpr.br; bstocks@NRCan.gc.ca;
jantro@mobilixnet.dk; ricardo.velez@dgcn.mma.es; gxnrtc@panafonet.gr;
ElHadji.Sene@fao.org; Gillian.Allard@fao.org; Jim.Carle@fao.org;
Christel.Palmberg@fao.org; Michel.Malagnoux@fao.org; Manuel.Paveri@fao.org;
Ali.Mekouar@fao.org; sakharov@un.org; charlebois@un.org; Christopher.Prins@fao.org;
Jorge.Najera@unece.org

UNITED NATIONS RESPONSE TO ENVIRONMENTAL EMERGENCIES

To improve the international response to Environmental Emergencies the Environmental Emergencies Section (formerly the Joint UNEP/OCHA Environment Unit) of the UN Office for the Coordination of Humanitarian Affairs (OCHA) was established in 1994, following extensive consultations with Governments. The Section, which is organizationally located within OCHA's Emergency Services Branch, is a partnership between UNEP and OCHA that serves as the integrated United Nations emergency response capacity to activate and provide international assistance to countries facing environmental emergencies. The Section is available for urgent assistance on a 24-hour a day, 7 day-a-week basis through OCHA's established emergency response system to assist those in need.

The Section provides practical assistance to countries affected by environmental disasters such as chemical and oil spills, industrial and technological accidents, forest fires and other sudden-onset emergencies that cause or threaten environmental damage leading to potentially serious health and environmental implications. The Geneva-based Environmental Emergencies Section is able to intervene anywhere in the world through a global network of National Focal Points consisting of governmental organizations responsible for environmental emergencies at the national level. Of special interest to the FAO/ITTO Fire Management Network is the fact that the Section has responded to four forest fire incidents in recent years: twice in Indonesia, once in Russia, and once in the State of Roraima in Brazil in April 1998.

The Environmental Emergencies Section ensures a prompt international response to environmental disasters in the following ways:

Monitor – Ongoing communication with an international network of contacts and permanent monitoring of news services and web sites, for early notification of environmental occurrences.

Notify – Promptly alert the international community and issue situation reports to a comprehensive list of worldwide contacts;

Broker – Quickly establish direct contacts between affected countries and donor governments that are ready and willing to assist;

Inform – Serve as a clearinghouse to channel available information, technical data and advice from donor sources and institutions to relevant authorities in the affected country;

Mobilize – Swiftly mobilize and coordinate multilateral assistance when requested to do so by the affected country;

Assess – Arrange for the urgent dispatch of international experts to assess the impacts of an emergency and make impartial and independent recommendations for response and remediation.

Emergency Cash Grants – In specific cases, the Section is able to mobilize emergency cash grants of up to US \$50,000 to address immediate needs.

OCHA has expressed an interest in coming to Rome to meet with FAO to discuss a variety of mutual interests. At that time OCHA would be prepared to brief FAO on their Mission and to suggest ways that FAO (Forestry) and OCHA might cooperate more actively in the future through “Interface” procedures. Mr. Sakharov provided copies of the “Interface Procedures” that presently exist between Environmental Emergencies Section and the following organizations:

- UN/ECE
- The Global Fire Monitoring Center
- The Secretariat of the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (SBC)

The role of the United Nations’ Disaster Assessment and Coordination Team (UNDAC) was described. The team is composed of experienced disaster management professionals funded by member governments and fielded in support of the disaster response role of UN/OCHA. After the UNDAC team arrives at the disaster site, they transmit information to OCHA’s Emergency Services and Response Coordination Branches. The Response Coordination Branch’s Regional Desk Officers mobilize assistance by immediately advising governments and international humanitarian organizations about casualties, damage and priority relief needs through situation reports. More can be learned about the operations of OCHA and UNDAC at the following website: www.reliefweb.int

Copies of the four UNDAC reports produced as a result of responses to recent forest fires are available through OCHA:

1. Indonesia Forest Fires, September-November 1997
2. Brazil, Fires in the State of Roraima, August 1997-April 1998
3. Indonesia, Land, Bush, and Forest Fires, March-April 1998
4. Russian Federation, Forest Fires on the Island of Sakhalin and the Khabarovsk Krai, September-October 1998

OPERATIONS OF THE GLOBAL FIRE MONITORING CENTER

The Fire Management Consultant visited the Global Fire Monitoring Center at Freiburg University, Freiburg, Germany, on 12-13 July 2001. Center staff, including Director Johann Goldammer, Ms. Mirjam Blasel, Mr. Alex Held, and Mr. Florian Resch, provided an in-depth briefing regarding the Mission of GFMC.

The GFMC was established in 1998 at the Fire Ecology and Biomass Burning Research Group of the Max Planck Institute of Chemistry, Germany. The GFMC was initially sponsored by the Government of Germany, Ministry of Foreign Affairs, Office for the Coordination of Humanitarian Assistance, as a German contribution to the UN International Decade of Natural Disaster Reduction (IDNDR). With the end of the IDNDR (1990-2000) the GFMC intends to support the implementation of the International Strategy for Disaster Reduction (ISDR), and the work of the UN Interagency Task Force for Disaster Reduction and its Early Warning Programme.

The GFMC was designed as an information and monitoring facility which national and international land managers, fire managers, disaster managers, scientists, and policy makers can use for planning and decision making. The fire documentation, information, and monitoring system is accessible through the Internet at <http://www.uni-freiburg.de/fireglobe>

During discussions in Geneva with UNECE and UN/OCHA, it became obvious that these two organizations benefit substantially from cooperative arrangements with GFMC. Thus, a draft Agreement between FAO and GFMC was developed by the Fire Management Consultant before departing Freiburg, so that FAO Forestry and GFMC could realize similar benefits. This draft Agreement was presented at the close-out briefing in Rome and later modified by FAO. The revised draft Agreement is presented in Annex 9.

**FIRST DRAFT OF AGREEMENT BETWEEN FAO AND THE GLOBAL FIRE
MONITORING CENTER**

In line with the recommendations of the FAO/ITTO International Expert Meeting on Forest Fire Management in March 2001, which encouraged international cooperation, and subsequent discussion between the Consultant for Forest Fire Management and the Head of the Global Fire Monitoring Center, Germany, discussions should be pursued to enter into a formal agreement between FAO and GFMC.

**MEMORANDUM OF UNDERSTANDING REGARDING
COLLABORATION IN THE FORESTS SECTOR**

between

**THE FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS
(FAO)**

and

**GLOBAL FIRE MONITORING CENTER
(GFMC)**

Background

The Food and Agriculture Organization of the United Nations (FAO) has a mandate to monitor and assess forest resources and uses, to analyse the data, to make information about forests and forestry widely available to member countries, and to provide a neutral forum for discussions on technical and policy issues.

The Expert Consultation on Global Forest Resources Assessment 2000 held in Kotka, Finland, in June 1996, recommended that FAO provide annual estimates in the Forest Resources Assessment 2000 on the number and extent of forest fires.

The above priorities have been confirmed in sessions of the Committee on Forestry (13th, 14th, 15th Sessions), and have been included in the work programme of the Forestry Department.

Subsequently FAO, within the framework of the FRA 2000 programme, was able to institute a system for collecting country-based forest fire data for developing countries. This work was supported by the Global Fire Monitoring Center.

The Global Fire Monitoring Center (GFMC), which cooperates closely with the UN International Strategy for Disaster Reduction (ISDR), monitors, forecasts and archives information on vegetation fires (forest fires, land-use fires, smoke pollution) at global level.

This information provides support to decision makers at national and international levels in the evaluation of fire situations or precursors of fire, which potentially endanger human life or which may negatively affect the environment. The GFMC was inaugurated at the time of the FAO Consultation on "Public Policies Affecting Forest Fires", held in Rome, 28 to 30 October 1998. The GFMC has its headquarters in the Fire Ecology and Biomass Burning Research Group of the Max Planck Institute of Chemistry, located at Freiburg University, Germany. The GFMC products, up-dated on a daily basis, are public domain, and are accessible through the Internet.

Purpose

The purpose of this Memorandum of Understanding is to draw upon common interests in order to improve collaboration between the organizations/institutions and thus jointly to play a more effective role in working together to address the underlying causes of forest fires, to improve the coordination of efforts to manage, prevent and combat forest fires and to disseminate reliable data and information on forest fires.

Areas of Mutual Interest

Topics of mutual interest include, but are not necessarily limited to:

1. Improved dissemination of information about forest fires
 - Internet linkages
 - State of the World's Forests (SOFO)
 - GFMC and FAO Websites
2. Development of fire management information systems.
3. Initiation and maintenance of wildland fire databases.
4. The development and display of Country Fire Profiles.
5. Joint organization of regional and international fire management workshops.

Potential Modalities of Cooperation

- Joint studies on themes of mutual interest
- Review of each others' work (peer reviews)
- Exchange of staff
- Linkages between databases / information systems / web publishing
- Periodic meetings to facilitate exchange of ideas and information

Plan of Work

On a periodic basis, and not less than once every two years, the organizations will develop a plan of work outlining specific areas of cooperation during the next one to two years. This plan of work to be determined.

Points of Contact

FAO

GFMC

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Approvals

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Assistant Director-General
Forestry Department
Food and Agriculture Organization of the United Nations

Date

GFMC

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Date

MAJOR ELEMENTS OF INTERNATIONAL FIRE AGREEMENTS

<u>Agreement</u>	<u>Purpose</u>	<u>Parties to Agreement/ Involved Organizations</u>	<u>Defini- tions</u>	<u>Main Obligation s</u>	<u>Reimburse- ment of costs</u>	<u>Liabilities</u>	<u>Operating Plan/ Guidelines</u>	<u>Customs Provisions</u>	<u>Other Provision s</u>	<u>Duration/ Termination</u>
France-Spain,1959	X	X	o	X	X	X	X	X	X	X
Chile-Argentina, 1967	X	X	X	X	o	o	X	X	X	X
Spain-Morocco, 1987	X	X	o	X	X	X	X	X	X	X
Spain-Portugal, 1992	X	X	o	X	X	X	X	X	X	X
Chile-Argentina, 1997	X	X	X	X	X	X	o	X	X	X
US-Canada, 1998	X	X	o	X	X	X	X	o	X	X
US-Mexico, 1999	X	X	X	X	X	X	X	X	X	X
US-Australia, New- Zealand, 2000	X	X	o	X	X	X	o	X	X	X
Russian Fed.- Mongolia, 2001	X	o	o	X	X	o	o	X	X	X
US-New Zealand, 2001	X	X	X	X	X	X	X	X	X	X

Note: X means element is present; o means element is absent.

Annex 11

MAJOR ELEMENTS OF ANNUAL OPERATING PLANS

<u>Annual Operating Plan/ Operational Guidelines</u>	<u>Authority (Authorizing Agreement)</u>	<u>Purpose</u>	<u>Terminology & Command Systems</u>	<u>Request</u>	<u>Personnel</u>	<u>Equipment & Supplies</u>	<u>Aircraft</u>	<u>Recall</u>	<u>Billing & Payment</u>	<u>Situation Reporting</u>	<u>Administrative/ Organizational Matters</u>
US-Canadian, States, Provinces, Territories, 2000	X	X	X	X	X	X	X	X	X	O	X
US-Canadian, States, Provinces, Territories, 2001	X	X	X	X	X	X	X	X	X	O	X
Mexico-US, 2000	X	X	X	X	X	X	X	O	X	O	X
Canada-U.S., 2001	X	X	O	X	X	X	X	X	X	X	X

Note: X means element present; O means element absent.