Closing Paper: Summary of the findings of the 3rd International Wildland Fire Conference and Directions for the Global Wildland Fire Summit and the Follow-up Process

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Abstract

The closing paper of the 3rd International Wildland Fire Conference will summarize the views and recommendations of the conference inputs papers and the discussions held in the conference sessions. This summary paper will be based on reports by session rapporteurs and will build the bridge to the Global Wildland Fire Summit which will be held on 8 October 2003 under the theme "Fire Management and Sustainable Development: Strengthening International Cooperation to Reduce the Negative Impacts of Fire on Humanity and the Global Environment".

The summit will recommend a series of strategies for a concerted international forest fire management program. To this end the summit will:

1. Reflect on the Political Declaration and Plan of Implementation of the World Summit for Sustainable Development (WSSD), international conventions and the outcomes of previous key conferences on wildland fires and identify outcomes and develop strategies to support and enhance the knowledge shared and networks developed at the 3rd International Wildland Fire Conference;
2. Determine appropriate mechanisms to improve global communication and knowledge sharing on wildland fire management;
3. Call for commitment from participants to immediate pragmatic actions which can be taken to assist in the management of wildland fuels and fires; and
4. Call for commitment fom participants to a global plan of action over the forthcoming five-year period that will result in positive outcomes in the reduction of the damage caused by wildland fires.

It is expected that the recommendations presented by the speakers and discussants at the 3rd International Wildland Fire Conference will provide the most recent priority inputs to the Summit and the follow-up process.

1. Rationale for the 3rd International Wildland Fire Conference and the International Wildland Fire Summit

The increasing incidence, extent and severity of uncontrolled burning globally, together with its many adverse consequences, has brought fire into the international environmental policy arena, with growing calls for international action leading to greater control of burning, especially in tropical countries. Despite this concern, there is a paucity of accurate and timely information on the numbers of fires, area burned and phytomass consumed annually at

national, regional and global scales, and on the social, economic and environmental costs. Given that fire is also an important natural process in many ecosystems, and that people have traditionally used fire for millennia as a land-management tool, the challenge is to develop informed policy that recognizes both the beneficial and traditional roles of fire, while reducing the incidence and extent of uncontrolled burning and its adverse impacts.

As suggested in the early stage of the formation of the Working Group on Wildland Fire of the United Nations International Strategy for Disaster Reduction (UN-ISDR), Inter-Agency Task Force for Disaster Reduction, and in the process of coordinating the preparation of the 3rd International Wildland Fire Conference and the International Wildland Fire Summit, the outcomes of the World Summit for Sustainable Development (WSSD) (Johannesburg 2002) would provide the ground and mandate for an action programme to reduce the negative effects of wildland fire on environment and humanity.

The International Wildland Fire Summit will be held two days after the 3rd International Wildland Fire Conference on 8 October 2003 under the theme "Fire Management and Sustainable Development: Strengthening International Cooperation to Reduce the Negative Impacts of Fire on Humanity and the Global Environment".

The Summit theme had been selected to underscore the need to address the increasing vulnerability of ecosystems and human populations to uncontrolled wildland fires as well as the inappropriate or excessive application of fire in modifying vegetation cover. Consequently a high priority has been given to define solutions and to enhance international cooperation in the arena of wildland fire management.

At the time of writing this paper (pre-conference) it is not possible to gain insight into the numerous oral and poster contributions to the conference. However, the topics addressed by the invited and accepted voluntary papers reflect a broad representation of the international wildland fire family from the point of view of geographical, cultural and ecological diversity. The interdisciplinary, inter-sectoral and international nature of presentations mirrors a truly global representation of stakeholders involved in managing fire environments.

Since the objectives of the International Wildland Fire Summit will be an enhancement of international cooperation in wildland fire management this paper will provide a status report of the formation of the Global Wildland Fire Network with the focus on promoting cooperation within Regional Wildland Fire Networks.

The establishment of the Global Wildland Fire Network has been defined as one of the priority fields addressed by the UN-ISDR Working Group on Wildland Fire, aimed at enhancing existing capabilities in fire monitoring, early warning and impact assessment and facilitation of international cooperation in fire management.

2. History, proposed *Modus Operandi*, and Status of the Global Wildland Fire Network through Regional Wildland Fire Networks

2.1 History

In accordance with the Framework for the Implementation of the United Nations International Strategy for Disaster Reduction (ISDR) the World Conservation Union (IUCN)

and its associated partner, the Global Fire Monitoring Center (GFMC) proposed, in 2000, to create a "Working Group on Wildland Fire" under the auspices of the UN-ISDR Inter-Agency Task Force for Disaster Reduction (IATF).

This proposal was in line with several declarations made in international conferences during the last five years and is intended to bring together both the technical members of the fire community and the authorities concerned with policy and national practices in wildland fire management to realise their common interests of fire risk management and disaster reduction at global scale. The UN-ISDR Inter-Agency Task Force for Disaster Reduction (IATF) at its second meeting on 11 October 2000 agreed to establish the Working Group on Wildland Fire.

Through the Working Group it is envisaged to establish an interagency and inter-sectoral forum of UN and other international agencies and programmes, and mechanisms of information and task sharing in the field of reducing the negative impacts of fire on the environment and humanity.

Three priority fields of activity are being addressed by the Working Group on Wildland Fire:

(i)   Establishment of, and operational procedures for, a global network of regional- to national-level focal points for early warning of wildland fire, fire monitoring and impact assessment, aimed at enhancing existing global fire monitoring capabilities and facilitating the functioning of a global fire management working programme or network.

(ii)   Development of a proposal for internationally agreeable criteria and common procedures / guidelines for fire data collection and fire damage assessment with the overall aim to generate knowledge required by the various user communities at global, regional, national and local levels.

(iii)   Strengthening the existing regional, national and local capabilities in fire management and policy development through information dissemination and networking.

Mandated and supported by the members of the Working Group on Wildland Fire the GFMC began to facilitate the establishment of the Global Wildland Fire Network in 2002-2003 (Figures 1 and 2). This network intends to encourage countries to establish or expand cooperative and networking activities between countries within regions. In some regions of the world such regional networking activities already existed under various umbrellas. These networks were encouraged to join the Global Wildland Fire Network.

The envisaged timeframe for setting up the network was January 2002 - July 2003. The 3rd Global Wildland Fire Conference and the International Wildland Fire Summit (Sydney, 3-6 and 8 October 2003) were intended to be used as a platform to convene representatives of the regional networks. At the 2nd and the 3rd Meeting of the International Liaison Committee (ILC) of the Conference and Summit it was decided to recommend to the Summit participants to utilize the Global Wildland Fire Network as a vehicle to follow up the recommendations of the Summit within the regions.

2.2 Proposed *Modus Operandi*

In the initial phase the Global Fire Monitoring Center (GFMC) will facilitate the establishment of the Global Wildland Fire Network on behalf of ISDR-WG-4. The GFMC will liaise with existing operational and proposed international networks. International organizations that have responsibility in the arena of wildland fire will be involved.

The Global Wildland Fire Network will work through Regional Wildland Fire Networks. Main networking activities will be conducted within regions that are either defined by regional agreements or by similar ecological, cultural and socio-economic conditions.

Regional Wildland Fire Networks may consist of focussed activities or be complemented by any other topical network. A harmonization with the overall objectives and efforts of other independent networks is desired. Topical networks will be coordinated / implemented by dedicated initiatives or networks. For instance, the regional implementation teams of the Global Observation of Forest Cover - Global Observations of Landcover Dynamics (GOFC-GOLD) will play a key role in the formation and operational functioning of wildland fire monitoring (see: http://gofc-fire.umd.edu/).

In addition to the operational networking activity the Global Wildland Fire Network may lso take over a role in capacity building, directly in the regions (example: Wildland Fire Training Center Africa: http://www.fire.uni-freiburg.de/GlobalNetworks/Africa/WFTCA.htm) and at international level. It is proposed to use the facilities of the newly established United Nations University Research and Training Centre "Human Security and Environment". The UNU RTC could serve as a center of excellence for training leaders responsible for international cooperation in wildland fire management (Figure 3).

2.3 Regional Coordination and Current Status

Regional network managers are in place in some regions. Some institutions and names mentioned in the following are provisional. Additional partners will be added as the regional networks develop. Regional network building has been facilitated by the GFMC / WG-4 during 2002-2003. A number of activities are being initiated in those regions where no regional network efforts are in place. The website for the facilitation of the Regional Wildland Fire Networks is on the GFMC website at:

http://www.fire.uni-freiburg.de/GlobalNetworks/globalNet.html

The status of the formation and progress of the Regional Wildland Fire Networks is provided following.

Regional Subsahara Africa Wildland Fire Network

The Regional Subsahara Wildland Fire Network ("Afrifirenet") was launched on 3 July 2002 at the occasion of the Wood for Africa Conference (Pietermaritzburg, South Africa). As of July 2003 more than 70 representatives from 13 African countries have registered as members of the network. An active partner is the Southern Africa Fire Net (SAFNet), the regional GOFC-GOLD Implementation Team (http://safnet.umd.edu/. A website for the Regional Subsahara Wildland Fire Network has been established on the GFMC information system at: http://www.fire.uni-freiburg.de/GlobalNetworks/Africa/Afrifirenet.html

Regional South East Asia Wildland Fire Network

At the World Conference on Land and Forest Fire Hazards (Kuala Lumpur, Malaysia, June 2002) two significant events paved the road for improving cooperation in fire management within the ASEAN (Association of South East Asian Nations) region and at international level. Building on almost a decade of cooperation in reducing the impacts of smoke-haze from land-use fires on the region the signing of the legally binding ASEAN Agreement on Transboundary Haze Pollution (10 June 2002; subject to national ratification) constitutes the first regional / multinational agreement for cooperation in fire management. At the ASEAN Senior Officials for Environment (ASOEN) Haze Technical Task Force meeting (10 June 2002) and the subsequent ASEAN Ministerial Meeting on Haze (11 June 2002) it was recommended that the ASEAN nations work together with the GFMC to establish a South East Asian Wildland Fire Network. In future the Regional Network most likely will be coordinated by the ASEAN Coordination Centre for Transboundary Haze Control, a facility that will be created after the ratification of the ASEAN Agreement on Transboundary Haze Pollution.

Furthermore, the conference released a "Statement to the World Summit on Sustainable Development" (Johannesburg, South Africa, September 2002) in which it was stated: "Information sharing and exchange for fire early detection and warning methodologies to address fire management and the associated hazards as well as international cooperative initiatives could be facilitated by the formation of a regional network. Hence a Southeast Asia Network or ASEAN Network should be set up and linked to other regional networks to provide the flow of information and sharing of resources between the local, regional and global users."

At the Eleventh Joint Meeting of The Working Groups on Sub-Regional Fire-Fighting Arrangements (SRFAs) for Sumatra and Borneo (Singapore, 12-13 August 2002) it was decided to set up the "Regional South East Asian / ASEAN Wildland Fire Network" in conjunction with the global network coordinated by the Global Fire Monitoring Center. The ASEAN Secretariat will serve as a regional network coordinator. The regional website at the GFMC is:
http://www.fire.uni-freiburg.de/GlobalNetworks/SouthEastAsia/ASEAN-FireNet.html

Starting in May 2003 the ASEAN Secretariat initiated the conceptual design of the South East Asia Fire and Haze Information Centre. This facility will largely take over the role of the network information system.

Regional Baltic Wildland Fire Network

At the Baltic Exercise for Fire Information and Resources Exchange - BALTEX FIRE 2000 (Finland, June 2000) the UN ECE/FAO/ILO Team of Specialists on Forest Fires, through the Global Fire Monitoring Center (GFMC), initiated a communication and coordination process among the countries bordering the Baltic Basin. BALTEX FIRE 2000 was an initiative devoted to strengthen cooperation in forest fire management and transboundary cooperation in large fire disasters between all countries bordering the Baltic Sea. Participants were the nations bordering the Baltic Sea (Estonia, Finland, Germany, Latvia, Lithuania, Norway, Poland, Russia, Sweden) and neighbouring observer countries (Belarus, United Kingdom). The initiative is the starting point for the Regional Baltic Wildland Fire Network structures are have been established on the GFMC website at:

Regional Mesoamerica Wildland Fire Network

Several recent developments indicate the political willingness of nations in Central America and Mexico to share information and resources in fire management

An important regional initiative has been launched by the First Central Mesoamerican Meeting on Forest Fire Protection (Primera Reunión Mesoamericana de Cooperación en Materia de Protección contra Incendios Forestales) held in Guatemala City, 8-9 July 2002. This regional meeting was organized in the frame of the project ""Prevención y Combate de Incendios Forestales en Mesoamerica" of the "Programa Mesoamericano de Cooperación 2001-2002", launched at the occasion of the 4[h] Tuxtla Regional Dialogue. Delegates of Belice, Costa Rica, El Salvador, Guatemala, Honduras, México, Nicaragua and Panamá. The countries agreed formally to launch a programme of cooperation which includes sharing of information and resources in fire management as well as in capacity building. It had been envisaged to ratify the agreement within 60 days after the signing ceremony. As of July 2003 the agreement has not yet been ratified by all countries concerned.

Following this initial process a "Workshop to Develop a Regional Strategy for Forest Pests and Wildfire Management in Central America", was held at the National School of Forest Sciences (ESNACIFOR), Siguatepeque, Honduras, 26-30 August 2002. Main focus of the conference was on bark beetle and fire problems. The strategy, released on 7 October 2002, is in line with and strengthens the Mesoamerica policy initiated in Tuxtla Gutiérrez and Guatemala. A Regional Working Group will be established under the auspices of the Central American Commission for Environment and Development (Comisión Centroamericana de Ambiente y Desarrollo - CCAD). The strategy includes the recommendation to create international alliances with the Global Wildland Fire Network and the GFMC.

An important practical step in regional cooperation has already been initiated by the México National Comission for the Knowledge and Use of Biodiversity (Comisión Nacional para el Conocimiento y Uso de la Biodiversidad - CONABIO). Besides covering Mexico CONABIO is now offering its services for other countries in the region by providing daily updated fire occurrence maps derived from satellite imageries. Guatemala is currently the first country taking advantage of this offer.

An important activity in the region is the Guatemalan project "Prevención y Control Local de Incendios Forestales" (PRECLIF), supported by the German Agency for Technical Cooperation (Deutsche Gesellschaft für Technische Zusammenarbeit – GTZ), in cooperation with the Central American Communal Network for Risk Management (Red Comunitaria de América Central para la Gestión del Riesgo). In the frame of the Workshop „Acordar una política nacional de manejo del fuego en Guatemala" (Guatemala, 8 November 2002; supported by the GTZ and the GFMC) it was decided to initiate the official liaison between the Global Network and the Mesoamerican process.

On 2 June 2003 further consultations were held with the Government of Guatemala concerning cooperation between the *Mesoamerican Cooperation Regarding Protection against Forest Fires* and the GFMC. A Memorandum of Understanding (MoU) was signed by the Mesoamerican Permanent Technical Group on Forest Fires (Grupo Técnico Mesoamericano Permanente sobre Incendios Forestales), represented by Mr. Ronaldo

Herrarte, President of the Coordinating Council of the Sistema Nacional de Prevención y Control de Incendios Forestales (SIPECIF), Guatemala, and Executive Coordinator of the Presidency of Guatemala, and the Global Fire Monitoring Center (GFMC), UN International Strategy for Disaster Reduction (ISDR), Working Group on Wildland Fire, represented by the Chair, Dr. Johann G. Goldammer, concerning Cooperation in the Global Wildland Fire Network through active participation of the Regional Mesoamerica Wildland Fire Network.

All materials on the cooperative processes in the Mesoamerica Region are available at:
http://www.fire.uni-freiburg.de/GlobalNetworks/MesoAmerica/MesoAmerica.html

Regional South America Wildland Fire Cooperation

The United Nations Environment Programme (UNEP) in 2001-2002 proposed the creation of a Latin American initiative in fire management. This proposal is not yet implemented. Since the Mesoamerican cooperative agreement has been launched in July-August 2002 (see above) it is likely that the UNEP initiative will focus on South America.

Several regional activities will be important for building a Regional South America Wildland Fire Network:

The Brazilian National Space Research Institute (Instituto Nacional de Pesquisas Espaciais - INPE) and the Center for Weather Prediction and Climate Studies (Centro de Previsão de Tempo e Estudos Climáticos – CPTEC) have recently expanded the domestic scope of work and product delivery. Since 2002 INPE is providing daily data on fire monitoring and fire-weather prediction specifically (detailed) for Brazil and Peru and in an overview format for all South American Countries. Discussions have been held with the Brazilian institutions to have a close look at Brazil's capabilities to play a key role in the upcoming South American or Latin American Regional Wildland Fire Network. Materials on the processes in the South America Region are available on the web:
http://www.fire.uni-freiburg.de/GlobalNetworks/SouthAmerica/SouthAmerica.html

Regional Australasia Wildland Fire Network

In 1993 the Australian Fire Authorities Council (AFAC) was established to improve the collaboration and co-ordination of effort between those Australian agencies with a responsibility for the protection of life and property from fire and other emergencies. The membership of agencies from the greater region saw AFAC's name change to the Australasian Fire Authorities Council in 1996. The current membership of AFAC stands at twenty-four full members and eleven associate members. All Australian fire and emergency agencies are full members of AFAC, as is the New Zealand Fire Service. Among the associate members are the Hong Kong Fire Service, Singapore Civil Defence Force and the Papua New Guinea Fire Service, while East Timor, Fiji, Samoa and Tonga are in the process of lodging applications under this membership category. AFAC aims to promote and coordinate activities in fire prevention, management and research through five Strategy Groups.

This regional arrangement offers the most suitable conditions for taking the lead in building the Regional Australasia Wildland Fire Network. This suggested arrangement has been discussed in March 2003 in Melbourne at the occasion of the meeting of the International

Liaison Committee (ILC) of the 3rd International Wildland Fire Conference and International Wildland Fire Summit. The proposal will be followed up by AFAC. For more details see:
http://www.fire.uni-freiburg.de/GlobalNetworks/Australasia/Australasia.html

Regional Mediterranean Wildland Fire Network

Within the frame of the European Open Partial Agreement on the Prevention of, Protection Against and Organization of Relief in Major Natural and Technological Disasters (EUR-OPA Major Hazards Agreement) the 8th Ministerial Meeting (Athens, February 2000) supported the proposal of Greece to establish a European Centre at the General Secretariat for Civil Protection in Athens for coordination in the area of preventing and combating forest fires, to be a focal point of a network bringing together the main participants in the area, at both national and European level. On the occasion of a meeting held at the Greek General Secretariat for Civil Protection on 8 March 2002, the participants presented the proposal to create a European structure on Forest Fire Management that will have the coordination function of a network of national structures officially in charge of management of forest fires. The Euro-Mediterranean Fire Network will be created under the umbrella of the General Secretariat for Civil Protection. An Euro-Mediterranean board will be set up representing all national structures participating in the network as well as competent international and European organizations, and an executive secretariat in charge of the implementation of the program will be appointed by the General Secretariat for Civil Protection. Activities are initiated in 2002. The Council of Europe proposed that the Global Fire Monitoring Center (GFMC) through its global network of "Regional Wildland Fire Networks" should cooperate with this initiative.

Besides the EUR-OPA initiative the Mediterranean Disaster Information Network (EU-MEDIN), conceptually representing the European contribution to the Global Disaster Information Network (GDIN-International), provides an alternative or complementary opportunity for regional networking. In June 2002 an Expression of Interest (EoI) for "Integration and Networking of Natural Disasters Studies in Europe" within the 6th EU Framework Programme has been submitted by a number of European institutions. The proposed project seeks to make major advances in the development of integrated approaches to disaster mitigation and management. The purpose of EU-MEDIN is to develop and maintain and sustain a European infrastructure and network for integrated disaster research and for the dissemination of disaster-related information to research and user communities, in order to improve disaster preparedness, early warning, communication, rapid exchange of data and knowledge. Forest fires are a key issue in the proposed structure. The Global Fire Monitoring Center (GFMC) is participating in the EoI and will provide the information and communication tools for fire early warning, monitoring, data archiving and distribution, and technology and science transfer.

Following the discussions with FAO *Silva Mediterranea* in 2002 the formation of a Regional Mediterranean Wildland Fire Network is underway under the auspices of this FAO group. A Workshop on Multilateral Assistance Against Forest Fires in the Mediterranean Basin was held in Zaragoza, Spain, 10-11 June 2003. The objectives of the workshop included to study procedures to coordinate the existing mutual agreements and common legal and logistical tools to make effective, when needed, the multilateral assistance against forest fires within the Mediterranean Basin by sharing resources. A discussion was included about the possible role of the regional network and the GFMC to facilitate this process. The workshop was a preliminary activity to prepare a future Mediterranean conference on Multilateral Assistance against forest fires. For details see:
http://www.fire.uni-freiburg.de/GlobalNetworks/Mediterrania/Mediterrania.html

Regional Balkan Wildland Fire Network

Within the Priority Area 4 "Environment Protection, Resource Management and Risk Prevention" of the EU INTERREG IIIB programme, Central Adriatic Danubian South-Eastern European Space (CADSES), an expression of interest for a project proposal has been initially discussed by the Global Fire Monitoring Center (GFMC) in June 2002 to promote cooperative transboundary wildland fire risk management and prevention of disasters under the proposed "South East European Fire Management Network" (SEEFIRE). Envisaged participating countries include Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Hungary, the Former Yugoslav Republic of Macedonia, Romania, Serbia and Montenegro, and Slovenia.

The SEEFIRE Network would address the problem of wildland fires (forest fires and fires in other vegetation types) that are increasingly observed in the Southeast European transition countries. SEEFIRE would establish an interactive network of institutions of all countries listed below that are involved in the prevention and control of wildland fire. The network would support the transnational cooperation by facilitating the exchange of information and data in the field of early warning, monitoring and management of wildland fires, including transnational cooperation in fire management and improve the integration of fire protection plans in spatial planning. It will provide the basis for the implementation of spatial development plans. If financed under the EU INTERREG III / CADSES scheme SEEFIRE would constitute the Regional Balkan Wildland Fire Network. The Balkan network will include nations that are overlapping with the Regional Mediterranean Wildland Fire Network.

At the occasion of the International Scientific Conference "Fire And Emergency Safety During XXI Century - The Course of Europe" (31 October - 1 November 2002, Sofia, Bulgaria) the GFMC proposed the network formation with representatives of the Balkan Region. Bulgaria has accepted to assist in building the network and liaise also to a number of Central Asian states. In April 2004 the "ECE/FAO International Conference on Management of Forest Fire Emergencies and International Cooperation in the Eastern Mediterranean, Balkans and adjoining Regions of the Near East and Central Asia" will be held in Turkey (for details: See Regional Central Asia Wildland Fire Network). A preliminary website has been established at:
http://www.fire.uni-freiburg.de/GlobalNetworks/Balkan/Balkan.html

Regional Central Asia Wildland Fire Network

The Eastern Mediterranean Region, including the Balkan countries and the countries of the Near East and Central Asia, and other neighbouring countries of Central Asia, e.g. Mongolia and China, have recently suffered major forest and other wildland fire problems. The causes of an increasing occurrence of wildfires in forests and other wildlands, including the underlying reasons for increasing human-caused fires, vary within the region and are due to (1) the transition from centrally planned to market economies, (2) national to regional conflicts, creation of new nations, involving political tensions and war; (3) increasing population growth and land-use pressure, and (4) regional climate change involving an increasing occurrence of extreme droughts. It has been recognized that no regional activity is underway to establish cooperation in wildland fire management, including wildland fire science. In April 2004 the "ECE/FAO International Conference on Management of Forest Fire Emergencies and International Cooperation in the Eastern Mediterranean, Balkans and adjoining Regions of the Near East and Central Asia" will be held in Turkey. The conference

will serve as springboard for establishing cooperation between the regions mentioned. In particular, the conference will address the situation in Central Asia (Afghanistan, Iran, Kazakhstan, Mongolia, Uzbekistan, Turkmenistan, including the Central Asian parts of the People's Republic of China. The conference will be co-organized by the ECE/FAO/ILO Team Specialists on Forest Fire and the Global Fire Monitoring Center (GFMC).

The objectives of the conference are to provide (a) a forum in the Eastern Mediterranean, Balkan and adjoining Regions of the Near East and Central Asia, (b) prepare mechanisms for information and resources exchange in forest and other wildland fire management within the region, including the establishment of partnerships for joint activities in fire research, training and policy development, and (c) prepare proposals to governments and international organizations of the region to establish mechanisms for sharing resources in large fire emergencies in accordance with existing international procedures. It is currently planned to organize in-tandem a multilateral forest fire exercise in Bulgaria in which neighbouring countries are invited to participate. A preliminary website has been established at:
http://www.fire.uni-freiburg.de/GlobalNetworks/CentralAsia/CentralAsia.html

Regional North America Wildland Fire Network

Discussions about the formation and possible *modus operandi* of a Regional North America Wildland Fire Network are currently underway. The Fire Management Working Group (FMWG) of the FAO North American Forestry Commission (NAFC) represents a regional network and is a candidate to liaise North America's interests to the global network of Regional Wildland Fire Networks.

A proposal has been discussed in March 2003 in Melbourne at the occasion of the meeting of the International Liaison Committee (ILC) of the 3rd International Wildland Fire Conference and International Wildland Fire Summit. The proposal will be followed up by FMWG. For details on and links to the NAFC-FMWG see:
http://www.fire.uni-freiburg.de/GlobalNetworks/NorthAmerica/NorthAmerica.html

3. Conclusions and Recommendations

In the final phase of preparing the 3rd International Wildland Fire Conference and International Wildland Fire Summit a number of bilateral and multilateral cooperation agreements, established Regional Wildland Fire Networks and new regional initiatives indicate that cooperative efforts in wildland fire management are underway at international level. Some of these agreements have been practiced over the past three years, such as the mutual assistance in wildland fire emergencies between the U.S.A., Australia and New Zealand between 2000 and 2003; or the recent successful cooperation of European countries and neighbouring Mediterranean nations to assist France and Portugal in fighting the wildfires during the extreme fire season of 2003.

The Global Wildland Fire Network is not yet complete and is not yet fully functioning. Many countries within a designated region are not capable to fully communicate and share information or resources with their neighbours. Other countries are not yet connected to a regional network, e.g. some countries in South Asia (India, Pakistan, Nepal, Bhutan), East Asia (the Koreas, Japan) and their neighbours in the Near East and Central Asia that do not belong to ASEAN

Region or the Central Asian / Baltic Regional Network. However, direct relationships exist between the Global Fire Monitoring Center and most of these countries.

Here lies the challenge to the International Wildland Fire Summit and the follow-up process that needs to be agreed upon. The functioning of the networks through interactive communication, sharing of fire management resources, capacity building and political consultations must be facilitated and receive support. The contributions to the 3rd International Wildland Fire Conference demonstrate the progress of wildland fire science and management in countries which at the time of the 2nd International Wildland Fire Conference in 1997 had very limited to none capabilities in place. Thus, it can be assumed that the follow-up of this conference and the summit will result in realistic action that can be implemented within a reasonable timeframe.

References

Website of the Global Wildland Fire Network
http://www.fire.uni-freiburg.de/GlobalNetworks/globalNet.html

Website of the International Wildland Fire Summit:
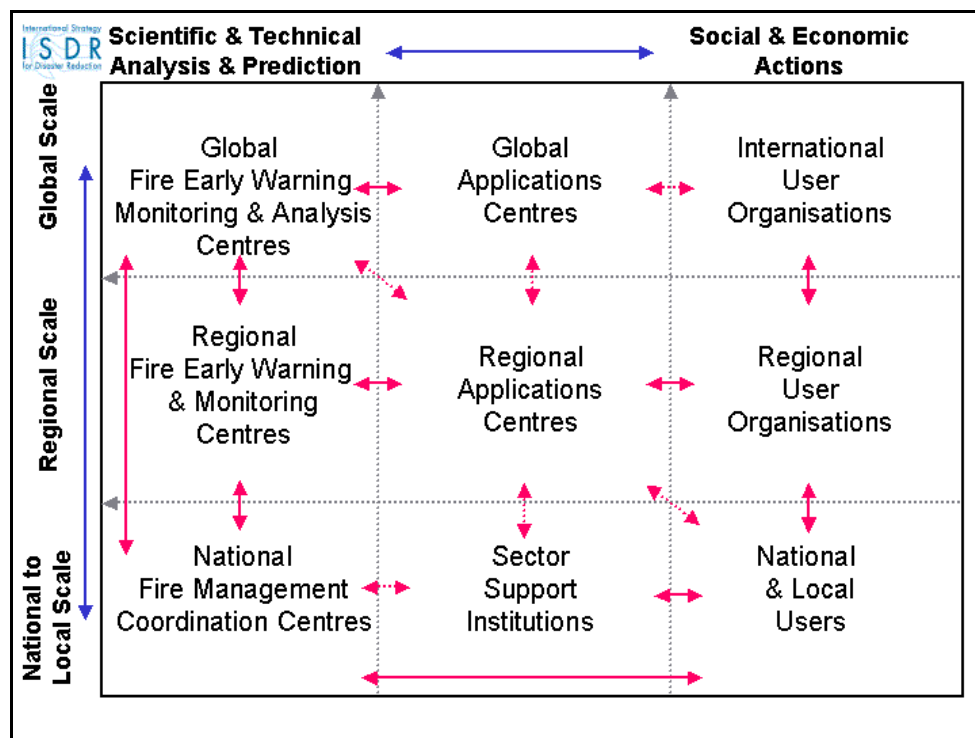http://www.fire.uni-freiburg.de/summit-2003/introduction.htm

Figure 1. Matrix, showing the envisaged structure of a Global Wildland Fire Network in which information and data will be exchanged and resources shared.
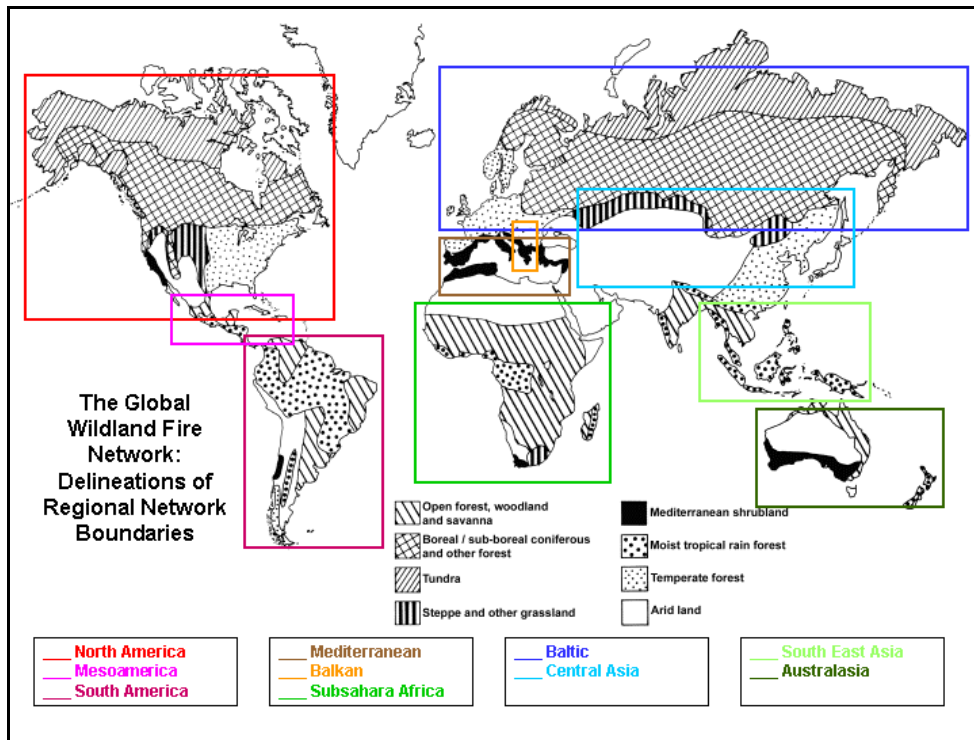
Figure 2. World map showing the delineation of existing and proposed Regional Wildland Fire Networks. The vegetation types correspond to characteristic fire regimes in the regions that are described in the background documents on the regional network web pages.
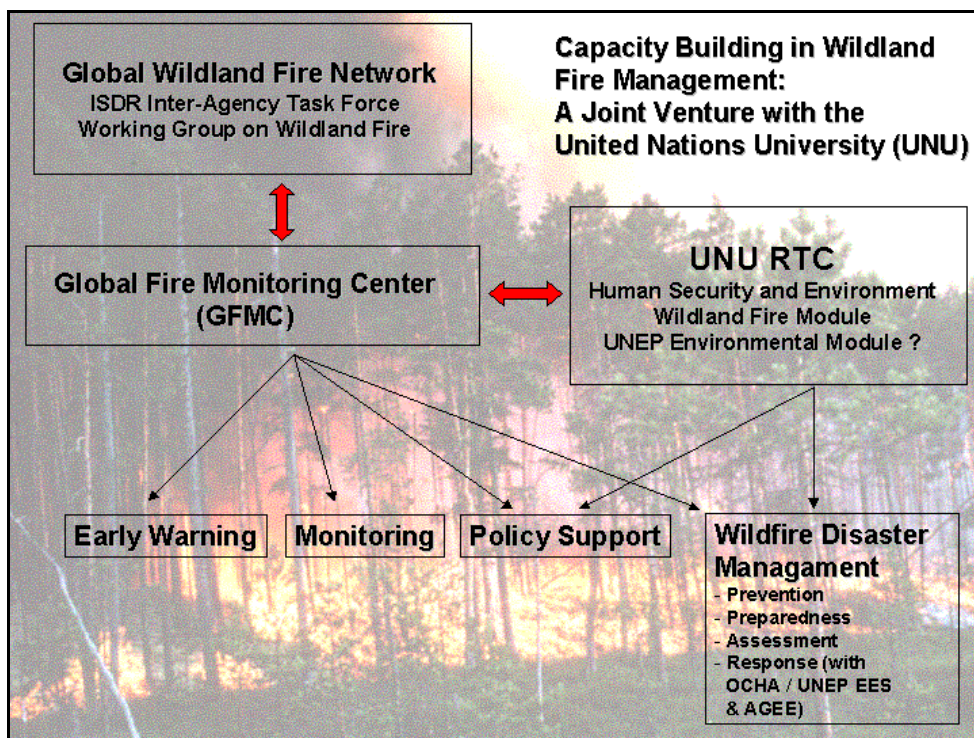

Figure 3. Schematic view of a proposed connectedness between the Global Wildland Fire Network and the United Nations University Research and Training Centre "Human Security and Environment". The UNU RTC could serve as a center of excellence for training leaders responsible for international cooperation in wildland fire management.