

Inter-Agency Task Force on Disaster Reduction

Twelfth Session

22-24 November 2005 Geneva, Palais des Nations

UN-ISDR Wildland Fire Advisory Group / Global Wildland Fire Network

Summary of Activities and Achievements between May 2005 and November 2005

IATF/DR-12/inf.8

For information

IATF/DR-12/inf.8 (05 December 2005) IATF/DR-12 documents are available on the ISDR website http://www.unisdr.org

UN-ISDR Wildland Fire Advisory Group / Global Wildland Fire Network¹

Coordinator and Secretariat: Global Fire Monitoring Center (GFMC), Freiburg, Germany²

Summary of Activities and Achievements between May 2005 and November 2005

Presented to the 12th Meeting of the Inter-Agency Task Force for Disaster Reduction

Date: 3 November 2005

Executive Summary

In the second part of 2005 the work of the Wildland Fire Advisory Group (WFAG) and the Global Wildland Fire Network (GWFN) focussed on four main issues: (1) consolidation of the Regional Wildland Fire Networks, (2) inter-regional cooperation and capacity building in wildland fire management under the GWFN, including the preparation of a conference for convening the GWFN in 2007, (3) contributions to the development of regional strategies and a global strategy on cooperation in wildland fire management, and (4) implementation of the Hyogo Framework of Action, with a special focus on early warning and inter-agency cooperation.

The current membership of the Wildland Fire Advisory Group is provided in Annex I. The detailed GFMC calendar with the individual activities of the Wildland Fire Advisory Group and the Global Wildland Fire Network is provided in Annex II.

1. Consolidation of the Regional Wildland Fire Networks

Between May and October 2005 consultations, sponsored by FAO and the German Foreign Office, were held in four Regional Wildland Fire Networks:

- Regional Mesoamerica Wildland Fire Network (Panamá City, Panamá, 24-26 May 2005): Development of a Regional Strategy of Cooperation in Wildland Fire Management in Mesoamerica (for details see section 3).
- Regional Caribbean Mesoamerica Wildland Fire Network (Santo Domingo, Dominican Republic, 31 May 2 June 2005: Development of a Regional Strategy of Cooperation in Wildland Fire Management in the Caribbean (for details see section 3).
- Regional Caribbean South America Wildland Fire Network (Curitiba, Brazil, 21 23 June 2005): Development of a Regional Strategy of Cooperation in Wildland Fire Management in the Caribbean (for details see section 3).
- Consultation of the Regional Central Asia Wildland Fire Network (Irkutsk, Russian Federation, 8-9 September 2005): First meeting on site with participation and contributions of Mongolia, Russian Federation, China and South Korea (representing the Regional Northeast Asia Wildland Fire Network).

¹ Wildland Fire Advisory Group: <u>http://www.unisdr.org/eng/task%20force/tf-working-groups4-eng.htm</u> Global Wildland Fire Network: <u>http://www.fire.uni-freiburg.de/GlobalNetworks/globalNet.html</u> ² http://www.fire.uni-freiburg.de/

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• Final workshop "Development of a Regional Strategy of Cooperation in Wildland Fire Management in Latin America and the Caribbean" (Santiago, Chile, 3-4 November 2005) (for details see section 3).

2. Inter-regional dialogue within the Global Wildland Fire Network

One of the main objectives of the GWFN is to promote international cooperation in wildland fire management in which knowledge and resources can be shared, based on internationally accepted standards, e.g. consistent wildland fire inventory, assessment and reporting systems (to be developed), common terminology, interoperable principles and procedures, or bilateral and multilateral agreements.

In order to strengthen the intra- and inter-regional dialogue the 4th International Wildland Fire Conference, to be hosted by the Government of Spain (Madrid, May 2007), will provide a first opportunity for the Regional Wildland Fire Networks to meet full scale under the patronage of the ISDR Global Wildland Fire Network. At the end of the conference a Global Wildland Fire Assembly will be convened and agree on cooperative and collective action. In continuation of the preparation of the conference the International Liaison Committee of the series of international wildland fire conferences (with membership largely overlapping with the Wildland Fire Advisory Group) met in Madrid, Spain, 6-7 June 2005. A draft conference outline is provided in Annex III.

For the systematic development and strengthening of capacity building within and between the Regional Wildland Fire Networks an agreement has been signed between the United Nations University (UNU) and the Max Planck Institute for Chemistry / Global Fire Monitoring Center (GFMC) on 7 October 2005. In accordance with the UNU mandate the GFMC will serve as a UNU Associated Institute and conduct capacity building / training in advanced wildland fire management together with international partners (Annex IV). The main objectives of this UNU partnership, notably the cooperation between the UNU Institute for Environment and Human Security (UNU-EHS) and the GFMC, is aimed at strengthening the efficiency of the UN system and the ISDR Global Wildland Fire Network with regards to wildland fire disaster reduction.

3. Development of regional strategies and a global strategy on cooperation in wildland fire management

Three of the regional consultations / workshops (listed above in Section 1) were held with the objective to draft Regional Strategies of Cooperation in Wildland Fire Management. The workshops were financed and conducted by the FAO Technical Cooperation Project TCP/RLA/3010 (C) "Development of a Regional Strategy of Cooperation in Wildland Fire Management in Latin America and the Caribbean". The GFMC provided scientific and technical support. Participants represented the ISDR Regional Wildland Fire Networks of Mesoamerica, South America and the Caribbean.³ On 3-4 November 2005 a final workshop was held in Chile in which the final version of the overall Latin America – Caribbean strategy was prepared (not yet finalized at the time of writing this report).

This activity in Latin America and the Caribbean is in compliance with the outcomes of the 2005 FAO Ministerial Meeting on Forests⁴ which called on FAO, in collaboration with countries and other international partners, including UNSIDR, to develop a strategy to enhance international cooperation on wildland fires, that advances knowledge, increases access to information and resources and explores new approaches for cooperation at all levels. Furthermore, the regional strategy development is in fulfilment of the recommendations of the FAO Committee on Forestry (COFO) which asked FAO to continue its support for regional and national networks to combat fire (as well as insects and disease), in collaboration with relevant organizations such as the United Nations International Strategy for Disaster Reduction and the Global Wildland Fire Network, and further requested that FAO work

³ According to the regional organization of the FAO Regional Office for Latin America and the Caribbean those regions that have formed a Regional Wildland Fire Network are designated as FAO "sub-regions".

⁴ At the FAO Ministerial Meeting on Forests (14 March 2005) and the 17th Session of the FAO Committee on Forestry (COFO) a total of 128 countries participated, represented by 40 ministers and 90 heads of forestry agencies. The ISDR Secretariat was represented by the GFMC. For details see WFAG/GWFN Report IATF_DR_11_inf10.

with partners to develop voluntary guidelines on the prevention, suppression and recovery from forest fire.

Following the FAO Ministerial Meeting the FAO Forestry Department started to draft voluntary guidelines, a process supported by the U.S. Department of Agriculture, Forest Service. The development of these guidelines is underway and will involve an expert consultation to be held in May 2006. In accordance with the recommendations of the ministerial meeting and COFO which called for a cooperative approach with the ISDR and the Global Wildland Fire Network, the GFMC drafted a proposal for a global strategy on behalf of the ISDR Wildland Fire Advisory Group and the Global Wildland Fire Network.⁵

4. Implementation of the Hyogo Framework of Action, with a special focus on early warning and inter-agency cooperation

Between January and October 2005 the GFMC coordinated the inputs of the Global Wildland Fire Network to the "Strategic Directions for the ISDR System to Assist the Implementation of the Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters" (July 22005) and the development of a matrix summarizing ISDR Partners' Activities Toward Implementation of the Hyogo Framework (October 2005).

Furthermore the GFMC is coordinating the inputs of the Global Wildland Fire Network to the upcoming Third International Wildland Fire Conference (EWC III). GFMC is serving as member of EWC III Local Scientific Programme Committee (LSPC). A wildland fire scientist from Canada (Canadian Forest Service) is representing the Global Wildland Fire Network in the EWC III International Scientific Advisory Board (ISAB).

Following the call for projects proposals for EWC III the GFMC coordinated the input of a project proposal "Global Early Warning System for Wildland Fire" which was submitted 31 October 2005. The executive summary is given in Annex V.

An Ad-Hoc Meeting on Wildland Fires was convened on 23 August 2005 by the Executive Director of the UN Environment Programme (UNEP), Dr. Klaus Toepfer, in the International Environment House, Geneva. Besides UNEP staff the participants included the Director of the GFMC, the Director, Deputy Director and staff of the ISDR Secretariat, the Joint UNEP/OCHA Environment Unit and UNECE staff. Under the impression of the devastating fires in Indonesia, South America and Southern Europe in 2005 the GFMC briefed the participants on the global fire situation. A follow-up activity by UNEP, in close cooperation with the GFMC, is underway.

Global Wildland Fire Network Finances

In the past two years the initial meetings for the creation of the Regional Wildland Fire Networks were financed with moderate resources from various donors. Greatest flexibility of the main sponsors (German Foreign Office, FAO, U.S.D.A. Forest Service) allowed co-financing and creation of synergies.

However, it must be pointed out that the process of "kicking-off" and founding network activities throughout the world requires very moderate resources for financing travel and some logistical support of a relatively small amount of specialists. The implementation of the recommendations, however, require finances for projects, programmes and investments that go far beyond the budgets that are currently in place. Priority must therefore be given on securing funding for the outreach work in the Regional Wildland Fire Networks. The support of the ISDR Secretariat is requested to assist the network in recruiting finances.

⁵ In addition a comprehensive report on the achievements and activities of the ISDR Global Wildland Fire Network has been published in a special issue of UN-ECE/FAO International Forest Fire News (IFFN) No. 31: http://www.fire.uni-freiburg.de/iffn/iffn_31/content31.htm

Conclusions

This report of the WFAG/GWFN reveals that despite the short reporting intervals of 6 months between the IATF/DR meetings the activities of building the Global Wildland Fire Network are continuing.

However, it must be clearly underscored that the work that has been initiated and achieved in the recent years cannot be continued in targeted field programmes, capacity building and strengthening of international policy dialogues and international agreements, if appropriate finances cannot be secured.

Starting in the second half of the IDNDR and right from the beginning of the functioning of the ISDR IATF/DR much of the coordinated efforts in wildland fire disaster reduction of the UN system has been consequently developed through the involvement of civil society. As the UNEP Executive Director had pointed out in the Ad Hoc Meeting on Wildland Fires (see Section 4) the GFMC has achieved much of the coordinated work that should have been done by the UN specialized agencies and programmes. Consequently, the UN system should put this partnership on a more formal basis by outsourcing UN responsibilities to the GFMC – but not without providing personnel and financial resources that are required for this work.

Annex I

Members, UN-ISDR Wildland Fire Advisory Group

Updated 10 November 2005

Introductory Note

For detailed information on the Wildland Fire Advisory Group and the Global Wildland Fire Network see these regularly updated websites:

Wildland Fire Advisory Group (transition from ex ISDR-IATF Working Group on Wildland Fire) http://www.unisdr.org/eng/task%20force/tf-working-groups4-eng.htm

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

Global Fire Monitoring Center (GFMC) <u>http://www.fire.uni-freiburg.de/</u>

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3. International Organizations (UN, non-UN)

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Annex II

Calendar of the GFMC in its function as facilitator / coordinator of the ISDR Global Wildland Fire Network / Wildland Fire Advisory Group

(May – November 2005)

24-26 May 2005

Technical Sub-Regional Mesoamerican Workshop in preparation of the development of a Regional Strategy of Cooperation in Wildland Fire Management in Latin America and the Caribbean, supported by the FAO Technical Cooperation Project TCP/RLA/3010 (C) and the GFMC (C. Scholz); Panamá City, Panamá.

http://www.fire.uni-freiburg.de/GlobalNetworks/Panamerica/Panamerican-Conference.htm

31 May – 2 June 2005

Technical Sub-Regional Caribbean Workshop in preparation of the development of a Regional Strategy of Cooperation in Wildland Fire Management in Latin America and the Caribbean, supported by the FAO Technical Cooperation Project TCP/RLA/3010 (C) and the GFMC (J.G. Goldammer); Santo Domingo, Dominican Republic.

http://www.fire.uni-freiburg.de/GlobalNetworks/Panamerica/Panamerican-Conference.htm

3 June 2005

First IFFN / GFMC Global Wildland Fire Network Bulletin distributed: http://www.fire.uni-freiburg.de/media/bulletin_news.htm

6 – 7 June 2005

Meetings of the International Liaison Committee of the series of International Wildland Fire Conferences, in preparation of the 4th International Wildland Fire Conference (to be hosted by the Government of Spain, Madrid, 2007) (J.G. Goldammer); Madrid, Spain. http://www.fire.uni-freiburg.de/course/meeting/2007/meet2007_01.htm

21 – 23 June 2005

Technical Sub-Regional South American Workshop in preparation of the development of a Regional Strategy of Cooperation in Wildland Fire Management in Latin America and the Caribbean, supported by the FAO Technical Cooperation Project TCP/RLA/3010 (C) and the GFMC; Curitiba, Brazil.

• http://www.fire.uni-freiburg.de/GlobalNetworks/Panamerica/Panamerican-Conference.htm

12 July 2005

Consultations on cooperation between the GFMC / UN-ISDR Wildland Fire Network and the Intergovernmental Panel on Climate Change and reporting format for wildland fires, with visiting scientist Dr. John Raison, CSIRO, Canberra, Australia; GFMC.

13 July 2005

Consultations with Prof. Dr. Mark Adams, Bushfire Cooperative Research Center (CRC), Melbourne, Australia, concerning cooperation between the CRC and the GFMC, and the Global Multi-Hazard Early Warning System; GFMC.

14 July 2005

Consultations on the establishment of a Forest and Fire Monitoring Center for Southern Chile as a sub-regional contribution to the Regional South America Wildland Fire Network and REDLATIF, with Dr. Victor Sandoval, Universidad Austral de Chile, Valdivia, Chila; GFMC.

• <u>http://www.fire.uni-freiburg.de/GlobalNetworks/SouthAmerica/SouthAmerica.html</u>

14-17 August 2005

Consultations with José Eduardo Pérez Pérez, Director of the Department of Environment and the Voluntary Firefighters Corps (Cuerpo de Bomberos Voluntarios) of Paraguay / Regional South America Wildland Fire Network; signing of a cooperation agreement between the Cuerpo de Bomberos Voluntarios and the GFMC; GFMC.

23 August 2005

Consultations with the Executive Director of the UN Environment Programme (UNEP), Dr. Klaus Toepfer, about a UNEP Strategy for reducing the environmental impacts of vegetation conversion fires

in Southeast Asia on the environment and public health and safety (J.G. Goldammer); UNEP Environment House, Geneva, Switzerland.

30 August 2005

Second IFFN / GFMC Global Wildland Fire Network Bulletin distributed: http://www.fire.uni-freiburg.de/media/bulletin_news.htm

6-17 September 2005

Regional Central Asia Wildland Fire Network consultation and study tour; participation at the 2nd International Junior Forestry Prize Competition and the All-Russian Forest Day (J.G. Goldammer); Irkutsk, Susdal, Moscow, Russian Federation.

28 September - 2 October2005

Kick-off meetings of the Community-Based Fire Management (CBFiM) Pilot Project in Central Mozambique in the frame of the Regional project "Integrating Vulnerability and Adaptation to Climate Change into Sustainable Development Policy Planning and Implementation in Southern and Eastern Africa", co-sponsored and implemented by UNEP, the African Centre for Technology Studies [ACTS], the International Institute for Sustainable Development [IISD], the German Agency for Technical Cooperation [GTZ] and technically and scientifically supported by GFMC (J.G. Goldammer); Maputo, Beira and Gorongosa, Mozambique.

7 October 2005

Signing ceremony of an agreement between the United Nations University (UNU) and the Max Planck Institute for Chemistry / Global Fire Monitoring Center (GFMC) for functioning of the GFMC as an Associated Institution of the United Nations University (J.G. Goldammer, M.O. Andreae, J. A. van Ginkel, J. Bogardi); UNU Institute for Environment and Security (UNU-EHS), Bonn, Germany.

UNU-GFMC Website: <u>http://www.fire.uni-freiburg.de/programmes/un/unu/unu.htm</u>

3-4 November 2005

Regional Meeting on the Development of a Regional Strategy for International Cooperation in Wildland Fire Management in Latin America and the Caribbean (FAO Project TCP/RLA/3010 – C, supported by the GFMC) (J.G. Goldammer); Santiago; Chile.

Annex III



4 TH INTERNATIONAL WILDLAND FIRE CONFERENCE MAY 2007, MADRID, SPAIN (DRAFT 8 June 2005)

1. Introduction

The protection of the environment in the world cannot be effective without national and international fire management policies for wildland ecosystems that constitute an essential part of the habitable land and the functioning of the global system. National and international policies must be designed to meet both the specific local and the common global threats and must be developed cooperatively with all the stakeholders involved in the protection of the environment and humanity.

A series of International Wildland Fire Conferences was initiated in the late 1980s aimed at bringing 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 wildland fire risk management and disaster reduction at national, regional and global scales.

During the International Wildland Fire Summit, held in Sydney on 8 October 2003, the invitation presented by the representatives of Spain to organize and host the 4th International Wildland Fire Conference in 2007, was accepted.

The first general announcement of the Conference was presented at the 17th Session of the FAO Committee on Forestry, Rome, 15 March 2005, and at the 5th Session of the United Nations Forum on Forests, New York, 18 May 2005.

2. Objectives

Building on the objectives and outputs of the previous International Wildland Fire Conferences (Boston 1989, Vancouver 1997, Sydney 2003), the objectives of the 4th Conference will be the following

- Provide a forum for forest fire management leaders, politicians, professionals, researchers and practitioners from throughout the globe to discuss and work on critical fire issues affecting people, communities, resources and ecosystems in all Regions and work on a cooperative way in the consolidation of a Global Wildland Fire Management Strategy.
- Strengthen the effectiveness of the Regional Wildland Fire Networks and support their links into a Global Wildland Fire Network
- Provide a forum to display innovations, new technologies, products and methods for wildland fire management and interact with the Conference participants.

3. Organizers

The Ministry of Environment of Spain in cooperation with the International Liaison Committee (ILC) of the series of International Wildland Fire Conferences in Boston 1989, Vancouver 1997 and Sydney 2003, and the Wildland Fire Advisory Group of the United Nations International Strategy for Disaster Reduction (UN-ISDR).

The Conference will be held under the auspices of the United Nations International Strategy for Disaster Reduction (UN-ISDR) and Food and Agriculture Organization of the United Nations (FAO).

4. Participation

The conference is open to public participation. Regional Wildland Fire Networks through their members - government agencies, non-government organizations, research institutions, industry and other representatives of civil society - will contribute to the success of the conference.

5. Conference structure

The Conference will consist of Plenary Sessions, devoted to general issues, and Regional Sessions, devoted to special issues in the different Regions of the World.

Every Session, Plenary or Regional, will be open by a keynote speaker, presenting the issue en 20 minutes, followed by several 10 minutes presentations and discussion.

At the same time there will be a Dynamic Room, devoted to an Innovation Session, giving floor to researchers, professors, company experts, etc. A Technical Exhibition will run during the Conference to present new technologies, products and methods for wildland fire management.

After the session days several technical visits of one or more days according to the distance from Madrid will be scheduled.

6. Conference place

Madrid, Spain

Palacio de Congresos de Madrid Paseo Castellana 99 Date: 6-10 May 2007 www.madridconventioncentre.com

7. Conference dates

6-10 May 2007, after the fire season in the Southern Hemisphere and just before it in the Northern Hemisphere.

8. Working languages

English and Spanish with simultaneous translation.

9. Conference issues

- 1. Global change and wildland fire risk
- 2. Civil society and wildland fire
- 3. Public administration / local communities: Models of organizations for fire management
- 4. Ecology and biodiversity, the keys of wildland fire prevention
- 5. Information: A basic tool for the Global Strategy
- 6. Fire in the wildland/residential interface
- 7. Cost-efficiency in wildland fire suppression
- 8. Restoration of burned areas

9. International cooperation and policies: Proposals of the Regional Wildland Fire Networks for a Global Strategy on Cooperation in Wildland Fire Management.

10. Regional issues

General issue for all Networks: General reports from the regions (what are the main issues and problems in the regional wildland fire arena) and proposals for a Global Strategy of Cooperation in Wildland Fire Management

Specific suggested issues for regional presentations:

- A. Latin America (Mesoamerica, Caribbean and South America): Underlying causes of fire use and wildfires
- B. Australia and North America: Standardisation in fire management, a key for cooperation

- C. European Union, Mediterranean and Balkans: Standardisation in fire management, a key for cooperation; development of bilateral and multilateral agreements on cooperation in wildland fire management
- D. Russia, Central Asia, Northeast Asia: Countries in transition: Problems in wildland fire management as a consequence of recent socio-economic developments, decentralization and institution building.
- E. South / Southeast Asia: Experiences in community-based fire management and genderrelated issues
- F. Subsaharan Africa (savannas, tropical forests): Implications of civil wars, poverty and AIDS on sustainable land use and fire management
- G. International organizations and cooperation programmes on fire management: Indicators

Annex IV

Extract of the agreement between the United Nations University and the Max Planck Institute for Chemistry / Global Fire Monitoring Center (GFMC) for participation as an Associated Institution of the United Nations University (7 October 2005)

Description of the Joint Programme Activities

The objectives of the envisaged cooperation are within the scope of the UNU mandate as stipulated by the Strategic Directions of the University. The five thematic areas of UNU, namely, (i) Environment and Sustainability, (ii) Science, Technology and Society, (iii) Development and Poverty Reduction, (iv) Good Governance – from Local to Global, and (v) Peace and Security, will receive contributions from the Joint Programme in a cross-cutting and synergetic way.

(i) Environment and Sustainability

This theme area is the key area: Local to global functioning of ecosystems and the environment is increasingly threatened by excessive burning and uncontrolled wildfires. Fire is one factor in vegetation and subsequent land degradation, often in conjunction with other disturbances by humans.

The partners and members of the GFMC and the United Nations International Strategy for Disaster Reduction (UN-ISDR) Wildland Fire Advisory Group are mandated in their sectoral responsibility. Some selected examples: The three Rio Conventions, the Convention on Biological Diversity (CBD), the Framework Convention on Climate Change (FCCC) and the Convention to Combat Desertification (CCD) are concerned with the role of fire threatening biodiversity and climate, and contributing to desertification. The FAO is mandated to promote sustainable management of vegetation cover. The WHO is concerned with the impacts of fire-smoke pollution on human health. The WMO is concerned with fire-weather prediction and forecasting of smoke transport. UNEP-OCHA is mandated to respond to environmental and humanitarian crises. UN-ISDR is mandated to promote the development of concepts for disaster reduction with emphasis on preventive measures.

These UN agencies have joined the UN-ISDR Wildland Fire Advisory Group and cooperate with the GFMC. Through these agreed mechanisms we can make sure that our potential for providing information, capacity building and policy advice can be shared <u>synergistically</u> and in a cross-sectoral approach.

This thematic area is, within which the majority of the programmatic contributions of UNU-EHS fall. (Human Security in a Changing Environment, Strategic Directions 2005-2008 of UNU-EHS).

(ii) Science, Technology and Society

Science and technology are critical components of the work of the GFMC and the Global Wildland Fire Network. The already existing and continuously further developing information tools for wildland fire early warning, monitoring, modelling and damage assessment need to be transferred to the user community. An <u>informed and capacitated user community</u> is able to utilize the existing, internationally available tools at full extent. Their broader use will justify costs for developing these tools and avoid costly duplication of efforts. The most striking example is the satellite-generated information that is already in place and is not yet adequately used in the developing world. Together with the Global Observing System Strategy (GTOS) and its GOFC/GOLD (Global Observation of Forest Cover/Global Observation of Land Cover Dynamics) project a substantial contribution can be made in capacity building in the use of remote sensing information in wildland fire management and disaster reduction.

(iii) Development and Poverty Reduction

Excessive use of fire in land clearing/land-use change is an expression of poverty and land ownership/tenure conflicts (and of course other reasons such as illegal activities, land speculation, impact of global markets for cheap cash crop production etc.). Poverty reduction is one of the key elements in participative approaches in wildland fire management = Community-Based Fire

Management (CBFiM). Traditional community structures and traditional knowledge of sustainable land-use and fire-use methods have to be considered, as well as modern approaches in community participation in fire prevention and fire application. This is a very key issue of the envisaged activities – as GFMC did in the first training course in Southern Africa in 2004.

(iv) Good Governance – from Local to Global

Good governance is key to the success of a government/agency in implementing those laws and landuse plans that are available in most countries but often not worth the paper they are printed on. Since vegetation degradation by fire and other factors has complex underlying causes, and the many sectoral responsibilities of agencies often result in non-action or failure of implementation, it is an important aspect to bring the stakeholders together to jointly define common, overlapping and complementary activities that contribute to the reduction of fire damage. The GFMC has already conducted successful "National Round Tables on Wildland Fire Management" in which all the agencies of a country, plus the NGOs, representatives of local communities and international organizations/donors have jointly formulated national strategies and programmes in fire management. This tool of "National Round Tables on Wildland Fire Management" and "National Guidelines for Wildland Fire Management" can be systematically utilized in other countries, especially in the developing world and countries in transition.

(v) Peace and Security

It is considered that the work of the Global Wildland Fire Network is a contributor for the peace process. For example, it has brought together countries in some of the Regional Wildland Fire Networks which have not spoken to each other too much. A good example was the recent bordercrossing assistance in the Near East when Turkey dispatched firefighting resources to Syria, including crews, airplanes and helicopters, to assist in fighting a large and very destructive forest fire end of October 2004.

At the same time, a commitment was obtained from the government of Israel to assist Syria. That assistance was not needed anymore because of the successful intervention of Turkey. But this case reveals the result of our regional dialogue, which was the outcome of the so-called "Antalya Declaration on Cooperation in Wildland Fire Management in the Balkans, Eastern Mediterranean, Near East and Central Asia" (April 2004). In April 2005 the GFMC successfully organized the multinational wildland fire exercise EASTEX FIRE 2005 (Eastern European, Near East and Central Asian States Exercise on Wildland Fire Information and Resources Exchange) in Bulgaria. In this unique exercise regional wildland fire crews from Albania, Bosnia and Herzegovina, Bulgaria, Greece, Macedonia, Romania, Serbia and Montenegro, and Turkey participated.

It is believed that governments are willing to cooperate in responding to disasters – even between nations that have political tensions. The recent international and intra-national tsunami disaster response confirms that joint efforts in disaster management may contribute to overcome hostile relationships.

Applied Research and Training Courses in Advanced Fire Management: Contents and Target Groups

The contribution of the GFMC to the UNU-EHS mandate includes applied research for the development of concepts for capacity building in advanced wildland fire management. Depending on projects and requests the GFMC services would be able to cover:

- Methods of science and technology transfer for application in local fire management (wildland fire prevention, preparedness, suppression, rehabilitation) under different cultural, socioeconomic and ecological environments
- Methods and application of people-centred fire management (Community-Based Fire Management)

- Development of national strategies and policies for wildland fire management, including legislation
- Development of standards for international cooperation in wildland fire management (common terminology, standard procedures for cooperation in wildland fire emergencies)
- Training courses for international wildland fire management specialists, including experts for assessment and intervention missions

These activities coincide with the three activity clusters of the Strategic Directions and Work Plans of UNU-EHS:

- Developing policy-relevant and practical knowledge
- Capacity building
- Generation and dissemination of knowledge-based information

As the present Work Plan of UNU-EHS focuses predominantly on hazards like floods and droughts and on creeping environmental degradation processes the thematic scope of GFMC is clearly complementary. Thus the Joint programme will both strengthen and broaden UNU's activities in the area of environment and human security. The same affinities can be found in the identified target audiences.

The key target groups for applied research and capacity building include:

- Officials responsible for land and forest management at medium to high levels, including those responsible for community involvement, e.g., Community-Based Forest Management (CBFM) and Community-Based Fire Management (CBFiM)
- Other representatives of public administrations
- Private industry (e.g., private land owners, industrial forest, agricultural and pastoral enterprises)

At national and regional levels GFMC will support multi-stakeholder Round Tables for devising the development of:

- wildland fire management policies
- wildland fire management strategies
- local to national wildland fire management guidelines

In addition the GFMC will be available to conduct UN Inter-Agency round tables/discussion fora with involvement of non-UN international organizations, NGOs and civil society.

GFMC and its capacity building activities are supported by the Foreign Office of Germany as well as by UN agencies and other donor institutions. Through the association, GFMC and UNU-EHS will be in a stronger position to consolidate their respective funding bases and to generate additional funding for common endeavours.

Annex V

Summary of Project Proposal for Third International Conference on Early Warning

1. Project Title: Global Early Warning System for Wildland Fire

Partner Organizations:

- Global Fire Monitoring Center (GFMC), Max Planck Institute for Chemistry, c/o Freiburg University / United Nations University, Germany on behalf of the UNISDR Wildland Fire Advisory Group / Global Wildland Fire Network
- Canadian Forest Service (CFS), Edmonton, Canada
- World Meteorological Organization (WMO)
- World Weather Research Programme (WWRP)
- Bureau of Meteorology Research Centre (BMRC), Melbourne, Australia
- Global Observation of Forest and Land Cover Dynamics (GOFC-GOLD) Secretariat, Edmonton, Canada
- University of Maryland (UMD), USA
- Bushfire Cooperative Research Centre (BCRC), Melbourne, Australia
- European Centre for Medium Range Weather Forecasting (ECMWF)

Letters of support or endorsement by CFS, GOFC-GOLD, GFMC, BMRC, BCRC, WWRP/WMO, ECMWF and the German Foreign Office are attached to the main project document.

Primary Contact:

Johann G. Goldammer The Global Fire Monitoring Center (GFMC) / Fire Ecology Research Group Max Planck Institute for Chemistry, c/o Freiburg University Georges-Koehler-Allee 75, D - 79110 Freiburg GERMANY Tel:+49-761-808011; Fax: +49-761-808012 e-mail: johann.goldammer@fire.uni-freiburg.de / web: http://www.fire.uni-freiburg.de

Geographic Coverage:	Global
Timeframe:	3 years
Approximate Funding Needs:	<u>USD\$1,151,000</u>

2. Background and Motivation:

Land and forest fires (wildland fires) burn several hundred million hectares every year. Global fire activity is increasing and these fires have many serious negative impacts on human safety, health, regional economies and global climate change. Developing countries are often the most susceptible to the damaging impacts of fire because of increased vulnerability of human life and property (due to limited fire suppression capability), increased risk due to high fire frequency (often caused by the cultural use of fire), and sensitive economies (tourism, transport). To mitigate these fire-related problems, forest and land management agencies, landowners and communities require an early warning system to identify critical time periods of extreme fire danger in advance of their occurrence. A **people-centered Early Warning System** applied at the local community level will allow implementation of fire prevention, detection and pre-suppression plans before fire problems begin. There are many examples of current operational early warning systems in wildland fire. This project proposes a global system with new, more advanced early warning capabilities.

3. a) Objectives

- 1. To develop a global early warning system for wildland fire based on existing and demonstrated science and technologies.
- 2. To develop an information network to quickly disseminate early warning of wildland fire danger that reaches global to local communities.
- 3. To develop an historical record of global fire danger information for early warning product enhancement, validation and strategic planning purposes.
- 4. To design and implement a technology transfer program to provide training for global, regional, national, and local community applications in: a) early warning system operation, b)

methods for local to global calibration of the system, and c) using the system for prevention, preparedness, detection, and fire response decision-making.

b) Expected Impacts

- 1. Local communities will have the training and tools to mitigate fire damage by using early warning to implement appropriate fire prevention, detection, preparedness, and fire response plans before wild fire problems begin.
- 2. The early warning system will provide the foundation to build resource-sharing agreements between nations during times of extreme fire danger.
- 3. Training and development of local expertise and capacity building in wildland fire management for system sustainability.

4. Planned Activities

The project will be conducted in three phases: a) early warning system development, b) operational implementation, and c) technology transfer.

5. Implementing Agencies and Division of Labour

- a) EWS development & calibration: CFS, UMD, GFMC, BMRC, BCRC
- b) Operational implementation: BMRC, WMO, WWRP, ECMWF, GFMC, UMD
- c) Technology transfer: GFMC / UNU, GOFC-GOLD, CFS

6. Monitoring and Evaluation

A joint management group consisting of partner representatives, and other agencies as the parties may determine, will manage the overall activities under this project. This group will define and set priorities. At quarterly reporting periods, it will monitor activities and evaluate progress using project plan timelines and criteria.

7. Sustainability

System sustainability will be secured through the long-term scope of the research agendas of the participating institutions, expanding networking activities, and local (community-level) capacity building through technology transfer and training.

8. Budget	Total project cost:	USD\$2,509,000
9. Funding Sou	ght Partner funding request:	USD\$1,151,000 (46% of total cost)
10. Other Fund	ing Sources Partner funding contribution:	USD\$1,358,000 (54% of total cost)