



## **Framework for the Development of the International Wildland Fire Accord**

### Rationale, Status and Future Activities

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#### **1. Introduction: Purpose of this document**

Over the past decade a growing trend of excessive fire application in land-use systems and land-use change, and occurrence of wildfires of extreme severities has been observed in many regions of the world. Some of the effects of wildland fires are of transboundary nature, e.g. the consequences of smoke pollution on human health and safety, loss biodiversity, or consequences of destabilization at landscape level leading to desertification or flooding at transnational scale. The depletion of terrestrial carbon by fires burning under extreme conditions in some vegetation types, including organic terrain in peatland biomes, is one of the driving agents of disturbance of global biogeochemical cycles, notably the global carbon cycle. This trend is calling the international community to commonly address this problem. The development of informal partnerships, joint projects and formal agreements between government and non-government institutions are essential to enable nations to develop sustainable fire management capabilities. United Nations agencies, programmes and conventions, as well as governments and civil society are calling for developing synergies aimed at enhancing efficiency and international cooperation in wildland fire management. This paper proposes the development of an International Wildland Fire Accord to reinforce and strengthen international cooperation in wildland fire management.

This Paper provides

- a brief global situation assessment (including an annex with references)
- a list of major international actors involved in, or having expressed the intent of support, building an international alliance (UN, non-UN international organizations, NGOs, science community, civil society, and governments) to address global wildland fire problems
- a list of major international events up to 2004 manifesting the interests of the international community
- framework and activities to support the development of the International Wildland Fire Accord (2004-2005)

#### **2. Rationale: Global Wildland Fire Status and Trends**

Between the mid 1990s and 2004 significant changes have been noted in the occurrence and impacts of wildland fire in some regions of the world:

- Extended droughts triggered by the El Niño – Southern Oscillation (ENSO) phenomenon first experienced in Indonesia in 1983 and again in 1997-98 favoured excessive application of fire in land-use change and occurrence of large wildfires in the tropics, resulting in above-average emission pulses of greenhouse gases and near-ground smoke pollution affecting human health and security.
- Uncontrollable wildfires in the USA between 2000 and 2003 are considered to be a consequence of earlier fire exclusion policies and regional climate change.

- The CIS countries and other countries in transition suffered institutional shortcomings which resulted in widespread wildfires, particularly in the Russian Federation, the Balkans and Central Asia.
- Radioactive emissions from fires burning in forests contaminated by the Chernobyl disaster and other nuclear accidents in the Ukraine, the Russian Federation and Belarus continue to constitute a high threat to human health and security.
- Abandonment of the rural space in the Southern European countries involves less intensive utilization of vegetation biomass, thus resulting in increasing severities of fires with subsequent land degradation and secondary disasters.
- Increasing vulnerability of residential areas at the wildland-urban interface has been noted in North America and Australia where wildfires in the past decade have caused extremely high economic losses.
- The international community has responded to the increasing destructivity of wildland fires around the globe by drafting protocols, agreement guidelines and common terminology for enhancing international cooperation in wildland fire management.
- The Global Fire Monitoring Center (GFMC) and the FAO are instrumental to facilitate cooperative efforts and support UN policies through the UNISDR Global Wildland Fire Network and the UNISDR Wildland Fire Advisory Group.

### **Summary of global wildland fire trends:**

- Trends are determined by local to national socio-economic and political developments; needs have emerged to integrate fire management with the aim of distributing management responsibilities from governments to local populations
- Globalisation of markets determine fire use and fuel loads
- Increasing fire severity observed in many regions as a consequence of coupled direct and indirect impacts of human interference and environmental change
- Other regions experiencing the consequences of fire suppression or reduced fire use, with consequences on biodiversity, carrying capacity, landscape patterns, etc.
- Alarming trend of fire-induced carbon transfer from the terrestrial sphere to the atmosphere, especially from drained or climatically altered wetlands

### **3. Formation of the Global Wildland Fire Alliance towards the development of an International Wildland Fire Accord**

In the following the most important international organizations, institutions and other entities are listed that are currently contributing (or recently have contributed) to promoting the agenda of cooperation in the wildland fire arena at international level.

#### **3.1 Facilitation**

- Global Fire Monitoring Center (GFMC): Founded in 1998; support of UN institutions through its host institution (Fire Ecology Research Group) since the late 1980s, coordinating the facilitation through membership and mandate of:
  - UN International Strategy for Disaster Reduction (UN-ISDR): Working Group on Wildland Fire (2001-2003) and UNISDR Wildland Fire Advisory Group (since 2004), serving as inter-agency advisory body to the UN (chaired by the GFMC)
  - Global Wildland Fire Network: Programme facilitated by the GFMC, as an inter-agency programme of the ISDR, funded by the German government and FAO

#### **3.2 United Nations agencies, programmes and conventions mandated to address wildland fire**

- FAO: Promotion of international cooperation in wildland fire management; technical cooperation programmes (TCP) in the field, and information dissemination through seven

Regional Forest Commissions; Global Forest Fire Assessments (FRA 2000 and 2005) jointly with GFMC; Fire Management Guidelines for Temperate and Boreal Forests jointly with GFMC; Wildland Fire Management Terminology update jointly with GFMC, promotion of Community-Based Fire Management (CBFiM); information dissemination and international documentation with global reactivation since 1998.

- Regional teams of wildland fire experts:
  - ECE / FAO / ILO Team of Specialists on Forest Fire
  - North American Forestry Commission, Fire Management Working Group
  - FAO *Silva Mediterranea*, Forest Fire Working Group
- WHO: Development of Health Guidelines for Vegetation Fire Events (currently no active position)
- WMO: Early warning of El Niño, fire weather, smoke transport
- UNESCO: Disaster reduction programmes (currently no specific programme)
- UNEP/OCHA: Joint UNEP/OCHA Environment Unit; Advisory Group on Environmental Emergencies (AGEE), WSSD Type II Partnership on Environmental Emergencies (GFMC member, FAO maintaining a Fire Alert Web Page to relay national fire emergency requests)
- ITTO: Guidelines for Fire Management in Tropical Forests, support of national fire management programmes, including CBFiM
- UNU: Establishment of the Institute for Environment and Human Security (2004), with wildland fire module (first UN inter-agency activity in 2004: Joint GFMC / ISDR / FAO / OCHA / UNU / NEPAD Advanced Wildland Fire Management Training Workshop for SADC Countries)
- UN Conventions: Agreement with the secretariats of the three Rio Conventions on cooperation with GFMC/ISDR, at the Workshop “Forests and Forest Ecosystems: Promoting Synergy in the Implementation of the Three Rio Conventions” (Viterbo, April 2004)
- Convention on Biodiversity (CBD): Member of the ISDR-IATF Wildland Fire Advisory Group (since 2003)
- Convention on Combat of Desertification (CCD): collaborative arrangement with GFMC started in 2004
- Framework Convention of Climate Change (FCCC): collaborative arrangement with GFMC started in 2004
- UN Forum on Forests (UNFF): Member of the ISDR-IATF Wildland Fire Advisory Group (since 2003)

### **3.3 Non-Governmental Organizations**

- IUCN-TNC-WWF: Global Fire Partnership founded in September 2003; strategic meeting with international participation (May 2004) International Technical Committee for the Prevention and Extinction of Fire (Comité Technique International de Prévention et d’Extinction du Feu - CTIF): Reactivation of the Commission on Forest Fires (September 2003), First Conference: *Experiences from 2002-2003 Wildland Fire Seasons: Are we prepared for the challenges ahead?* (Austria, October 2003); Development of a Forest Fire Control Handbook for European Fire Services (by GFMC)
- Global Observation of Forest and Land Cover Dynamics (GOFC/GOLD) Fire Monitoring and Mapping Implementation Team: Global Forest Fire Assessment by spaceborne assets

## **4. Precursor activities to support the International Wildland Fire Accord (before 2004)**

- International Decade of Natural Disaster Reduction (IDNDR): The decade (1990s) promoted synergies between international groups and entrusted the GFMC to coordinate the programme “Early Warning of Wildland Fire and Related Hazards”
- ECE/FAO Conference Forest, Fire and Global Change (Russian Federation, 1996): Elaboration of a proposal for international cooperation in wildland fire management
- FAO Consultations on Public Policies and Cooperation (1998, 2001)
- International Wildland Fire Conferences in Vancouver (1997) and Sydney (2003)
- International Wildland Fire Summit (2003): Agreement on principles, international strategies and participatory fire management

## **5. Framework and activities to support the International Wildland Fire Accord (2004-2005)**

In 2004 and early 2005 (up to the FAO Ministerial Meeting on Forests, 14 March 2005) a number of regional conferences and consultations have addressed international cooperation in wildland fire management:

- Northeast Asia (Korea, March 2004): Foundation of the Regional Northeast Asia Wildland Fire Network, hosted by the Korean Forest Service
- ECE/FAO conference on Cooperation in Wildland Fire Management in the Eastern Mediterranean, Near East, Balkans, Central Asia (Turkey, 30 March – 2 April 2004): Consolidation of the Regional Wildland Fire Networks for the Balkans, Eastern Mediterranean / Near East, Western and Central Asia, hosted by the Forest Service of Turkey (see “Antalya Declaration on Cooperation in Wildland Fire Management in the Balkans, Eastern Mediterranean, Near East and Central Asia”); Turkey to host a Regional Wildland Fire Advisory Group, and Bulgaria to host the Balkans Network.
- Baltic Region (Finland, May 2004): Regional Baltic Wildland Fire Meeting (follow-up to ECE/FAO BALTEX FIRE 2000), hosted by the Ministry for Interior, Finland; consolidation of the Regional Baltic Wildland Fire Network and the regional work of the ECE/FAO Team of Specialists on Forest Fire
- South America (Brazil, June 2004): Foundation of the Regional South America Wildland Fire Network, meeting hosted by the University of Paraná, Curitiba, co-sponsored by FAO, GFMC, USFS, UNEP, TNC and others
- Central America (July-September 2004): Consolidation of cooperation arrangements in Central America (CCAD/CCAB, Mesoamerica Agreement, Implementation of the Honduras Strategy)
- Joint meeting of the Regional Wildland Fire Networks of South America, Central America, Caribbean (foundation meeting), and North America (NAFC Fire Management Working Group) in preparation of the Pan-American Wildland Fire Conference (Costa Rica, 21-22 October 2004) Signing of a Memorandum of Understanding between FAO and GFMC on joint activities related to increase international cooperation in wildland fire management, including a thematic report for the Global Forest Resources Assessment 2005.
- Pan-American Wildland Fire Conference (Costa Rica, 23 October 2004): Meeting of the FAO Regional Forestry Commissions of North America, Latin America and the Caribbean. Objective (among other): endorsement of the regional networking concepts prepared in Brazil and Costa Rica; recommendations for the FAO Ministerial Meeting on Forests (2005)
- Meeting of the ASEAN Haze Technical Task Force (HTTF) and ASEAN Ministerial Meeting on Haze, back to back with the First Meeting of COP to the Haze Agreement (Hanoi, Viet Nam, 8-11 November 2004)
- Presentation of the Regional Central Asia Wildland Fire Network and the Global Wildland Fire Network at the Regional Central Asian Forest Congress “Forest Policy: Problems and Solutions” (Bishkek, Kyrgyz Republic, 25-27 November 2004)
- Meeting of the UN-ISDR Wildland Fire Advisory Group and the Global Wildland Fire Network (GFMC / Germany, 3-4 December 2004): Preparation of recommendations for the FAO Ministerial Meeting on Forests (2005) reflecting the results of the regional and global consultations carried out in 2004.
- UN World Conference on Disaster Reduction (Japan, January 2005): The conference reviewed the Yokohama Strategy and Plan of Action (of 1994), including its wildland fire component, define WSSD-related specific activities and provided an opportunity for the Global Wildland Fire Network and UN-ISDR Wildland Fire Advisory Group to report on the Framework for the Development of the International Wildland Fire Accord

At the FAO Ministerial Meeting on Forests at which wildland fire will was a major agenda item (Rome, 14 March 2005) and the 17<sup>th</sup> Session of the FAO Committee on Forestry (COFO) (Rome, 15-19 March 2005) ministers and representatives of agencies responsible for forestry discussed a proposal directed to the United Nations concerning a coordinated effort in international cooperation in wildland fire management.

## Results

At the FAO Ministerial Meeting on Forests (Rome, 14 March 2005) ministers and representatives of agencies responsible for forestry

- **“called on FAO, in collaboration with countries and other international partners, including the International Strategy for Disaster Reduction, 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“.**

At the 17<sup>th</sup> Session of the FAO Committee on Forestry (COFO) (Rome, 15-19 March 2005) an “Action Programme for FAO in Forestry” was agreed. It included recommendation No. 53

- **“that FAO 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 with partners to develop voluntary guidelines on the prevention, suppression and recovery from forest fire”.**

All documents of the FAO Ministerial meeting and the 17<sup>th</sup> Session of COFO can be downloaded at these FAO web pages:

- FAO Ministerial Meeting: [www.fao.org/forestry/site/26480/en](http://www.fao.org/forestry/site/26480/en)
- 17<sup>th</sup> Session of COFO: [www.fao.org/forestry/site/2960/en](http://www.fao.org/forestry/site/2960/en)

In addition all documents referring to the development of an international wildland fire accord / global strategy are compiled on the website of the Global Wildland Fire Network:

- <http://www.fire.uni-freiburg.de/GlobalNetworks/RationaleandIntroduction.html>

## Editorial Note:

FAO and GFMC agreed to terminate the updating process of this framework document with the decisions of the ministerial meeting and COFO-17. The results were presented to UNFF-5 (New York, 16-27 May 2005) during which the Wildland Fire Advisory Group, jointly with FAO, The Nature Conservancy (TNC) and the U.S. Forest Service, organized a side event “Development of a Strategy or Agreement on International Cooperation in Wildland Fire Management” (18 May 2005).

The follow-up process will be reflected by reports of the FAO and the UNISDR Wildland Fire Advisory Group. These reports will be published or linked on the above-mentioned website of the Global Wildland Fire Network.

## ANNEX - References

Wildland Fire Advisory Group. 2003. Vegetation fires globally. An analysis for policy makers prepared for the (UN-ISDR Inter-Agency Task Force for Disaster Reduction and the International Wildland Fire Summit. ECE/FAO International Forest Fire News (IFFN) No. 29

<http://www.fire.uni-freiburg.de/summit-2003/Summit%20Background%20Paper%20Global%20Situation.pdf>

Global Fire Monitoring Center (GFMC)

<http://www.fire.uni-freiburg.de/>

FAO Wildland Fire Websites and FAO Global Forest Fire Assessment 1990-2000

[http://www.fire.uni-freiburg.de/programmes/un/fao/Wp55\\_eng.pdf](http://www.fire.uni-freiburg.de/programmes/un/fao/Wp55_eng.pdf)

UN-ISDR Wildland Fire Advisory Group

<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>

International Wildland Fire Summit

<http://www.fire.uni-freiburg.de/summit-2003/introduction.htm>

ECE/FAO International Forest Fire News (IFFN)

<http://www.fire.uni-freiburg.de/iffn/iffn.htm>

Convention on Biological Diversity

<http://www.fire.uni-freiburg.de/programmes/un/cbd.htm>

Joint UNEP/OCHA Environment Unit / WSSD Partnership for Environmental Emergencies

<http://www.reliefweb.int/ochaunep/>

<http://www.reliefweb.int/ochaunep/tools/wssd.htm>

WHO: Health Guidelines on Vegetation Fire Events

[http://www.who.int/docstore/peh/Vegetation\\_fires/vegetation\\_fires.htm](http://www.who.int/docstore/peh/Vegetation_fires/vegetation_fires.htm)

International Tropical Timber Organization (ITTO) Wildland Fire Websites

<http://www.itto.or.jp/live/index.jsp>

[http://www.fire.uni-freiburg.de/programmes/itto/itto\\_start.htm](http://www.fire.uni-freiburg.de/programmes/itto/itto_start.htm)

Global Observation of Forest Cover / Global Observation of Landcover Dynamics (GOF/C/GOLD) - Fire Mapping and Monitoring

<http://gofc-fire.umd.edu/>

Crutzen, P.J., and J.G. Goldammer (eds.) 1993. Fire in the environment: The ecological, atmospheric, and climatic importance of vegetation fires. Dahlem Workshop Reports. Environmental Sciences Research Report 13. John Wiley & Sons, Chichester, 400 p.

Ahern, F., J.G. Goldammer, and C. Justice (eds.). 2001. Global and regional vegetation fire monitoring from space: Planning a coordinated international effort. SPB Academic Publishing bv, The Hague, The Netherlands, 302 p.