Summary

This document summarizes the activities and achievements of the final phase of work of the UNECE/FAO Team of Specialists on Forest Fire, which was active since 1980 and, since 1993, worked in close cooperation with the Global Fire Monitoring Center (GFMC). In its final phase 2008-2014 the ToS had mandates, among others, to provide guidance to UNECE member States on forest fire management and forest fire policies, including on governance in bilateral and international cooperation.

In cooperation with the UNECE-FAO Forestry and Timber Section, the GFMC prepared and facilitated the "UNECE/FAO Regional Forum on Cross-boundary Fire Management" (November, 2013), and followed-up on the recommendations of the Forum (2014).

The 2013 Forum elaborated a number of recommendations addressing principles and envisaged international cooperation efforts in fire management. Based on a UNECE-wide survey a, "Study on the contemporary and expected future forest fire issues in the UNECE region", was developed as well as a “White Paper on the State of Wildfires and Fire Management in Forests and other Vegetation Resources in the UNECE Region”. In addition to recommendations, which addressed national and international governance in fire management, the GFMC supported by an international advisory group, prepared and recommended the international application of "International Fire Aviation Guidelines" and the "International Wildfire Preparedness Mechanism" (IWPM).
I. Background

1. During the recent decades, UNECE region has experienced unprecedented, large and disastrous wildfires as an accumulated consequence of socio-economic, land-use and climate changes. Some recent wildfire episodes also revealed an increasing vulnerability of society to the direct and secondary effects of fire.

2. In the Eurasian part of the UNECE region, some hazards and risks associated with wildfires have been perceived as threats only recently after the region experienced a number of large and disastrous wildfires and due to a better scientific understanding of conditions influencing wildfires.

3. Wildfires burning at the interface or even within residential, urban and industrial areas, and fires burning in terrain contaminated by radioactivity, industrial deposits and remnants of armed conflicts are perceived as new, unprecedented threats – although they have been around for some time, albeit largely unnoticed.

4. In the endeavour to enhance the protection of forests in Europe and globally it should be noted that wildland fires impact more than only forest ecosystems. Fire use and wildfire occurrence in the cultural landscapes of the region, which are shaped by agriculture, pastoralism and forestry, have positive and negative impacts on landscape patterns, land productivity, biodiversity and the atmosphere, with considerable implications for air quality, human health and security, and climate change.

5. While there have been advances in fire management in some countries, there are still barriers preventing the sharing of scientific and technical knowledge and good practice between wildfire agencies in different States.

6. These barriers have resulted in some wildfire agencies being unintentionally left in ignorance of the technical information and advancements that they could utilize to develop greater national resilience and preparedness for large wildfire incidents.

7. Given the cross-boundary consequences of wildfires, e.g. transboundary spreading of wildfire smoke pollutants, border-crossing wildfires and wildfire threats to common global assets such as biodiversity, terrestrial carbon pools, atmosphere and climate on the one side, together with the willingness of nations to share expertise and resources in fire management, UNECE member States were ready to develop voluntary principles and efficient procedures on cross-border cooperation and thus enhance economics, inter-operability and effectiveness in fire management between nations and regions.

8. Some countries already possess advanced wildfire knowledge, and have the technologies and expertise to manage wildfire risk effectively. The priority of future international cooperation should be to establish a mechanism that encourages this understanding to be shared between territories, enabling all countries to develop effective wildfire reduction strategies and providing the structure for more effective collaborative efforts during wildfire disaster situations.

II. Mandate

9. The terms of reference of the UNECE/FAO Team of Specialists on Forest Fire, led by the GFMC since 1993, were approved by the UNECE Timber Committee and the FAO European Forestry Commission in 2008 as a contribution
to the Integrated Work Programme, Work Area 2 “Policy Dialogue and Advice”, and included the following main objectives for the period 2008 to 2014:

- To promote a continuous exchange of (new) knowledge on and practices in fire management through the organization of meetings on Fire Management issues in the UNECE region;

- To provide guidance to UNECE member States on forest fire management and forest fire policies, including on bilateral / international cooperation, in close cooperation and coordination with the UNISDR Wildland Fire Advisory Group / Global Wildland Fire Network, FAO, UNISDR, the Council of Europe and other partners.

The mandated activities of the ToS on Forest Fires included the development of policy recommendations for fire management in the UNECE region to be summarized in a “White Paper on the State of Wildfires and Fire Management in Forests and other Vegetation Resources in the UNECE Region”. The expected major outputs included:

- Organization of a Regional Forum on Cross-boundary Fire Management.
- Preparation of a resolution of the Forum on a proposed voluntary or legal protocol on cross-boundary cooperation in fire management.
- Development of a White Paper on the State of Wildfires and Fire Management in Forests and other Vegetation Resources in the UNECE Region.

10. Following the recommendation of the UNECE Timber Committee and the FAO European Forestry Commission (ECE/TIM/2012/11, item 33) to "discontinue the ToS on Forest Fires, as the issue of fires is no longer addressed by the UNECE/FAO programme of work and is better addressed at the global level and through other channels", it was decided to phase out the ToS on Forest Fire by the end of July 2014 after the accomplishments of the expected outputs.

11. The project "Safeguarding Sustainable Forest Management in the UNECE Region through International Cooperation in Fire Management" was then initiated and supported by the Government of Germany with the following expected deliverables:

- A White Paper on the State of Wildfires and Fire Management in Forests and other Vegetation Resources in the UNECE Region” (summary of the analysis conducted before the Forum, and the recommendations for action as agreed upon by the Forum);
- Draft Standard Operating Procedures or guidelines for international cooperation in fire management (ground, aerial);
- A resolution of the UNECE/FAO Regional Forum on Cross-boundary Fire Management (2013) on proposed voluntary or legal protocol on cross-boundary cooperation in fire management.

12. The UNECE contracted the Global Fire Monitoring Center (GFMC), Max Planck Institute for Chemistry, Germany, which serves as the secretariat of the Leader of the ToS on Forest Fire, and provided a four-phased grant with the following terms of reference:

- Dissemination and evaluation of a questionnaire addressing the status of fire management in the UNECE region;
- Preparation of a, "Study on the contemporary and expected future forest fire issues in the UNECE region";
• Preparation of a, “White Paper on the State of Wildfires and Fire Management in Forests and other Vegetation Resources in the UNECE Region”;
• Preparation, facilitation and moderation, in cooperation with the UNECE/FAO Forestry and Timber Section, of the, "UNECE/FAO Regional Forum on Cross-boundary Fire Management";
• Development of International Fire Aviation Guidelines;
• Preparation of a Strategic Paper on the recommendations of the Regional Forum, including the proposed development of an International Wildfire Preparedness Mechanism (IWPM); and
• Identification of scenarios / options to implement the recommendations of the Regional Forum on Cross-boundary Fire Management that cover institutional arrangements within the United Nations system, international organizations and NGOs.

III. Progress of work

13. A Regional Forum on Cross-boundary Fire Management was held on 28-29 November 2013 at the United Nations in Geneva. The Forum was attended by 49 representatives from 22 UNECE Member States, from other regions, non-government organizations, regional and international organizations (ASEAN Secretariat, SADC Secretariat, Council of Europe, OSCE), and the following United Nations organisations and secretariats: UNECE / FAO Forestry and Timber Section; FAO; UN Office for Disaster Risk Reduction / UNISDR; OCHA Environmental Emergencies Section, Joint UNEP/OCHA Environment Unit, Emergency Services Branch; Secretariat of the UNECE Convention on Long-Range Transboundary Air Pollution.

14. The resulting recommendations from the Forum addressed, among others the:¹

• Need to promote the understanding of and the response to the transboundary effects of fire;
• Need to expand the scope of and strengthen of international cooperation in fire management;
• Application of a holistic approach to wildland fire management at a landscape level;
• Adoption and continued development of the International Wildfire Support Mechanism (IWSM) and the voluntary International Fire Aviation Guidelines;
• Need to explore options for the transition from voluntary rules to a more formalized regulatory framework, including the “exploration of options for establishing a UN Secretariat mandated with the implementation of a global

¹ For the terminology and substantial contents of the recommendations of the Forum: See item 15. The full text of the recommendations is available on the homepage of the ToS on Forest Fire: http://www.fire.uni-freiburg.de/intro/team.html. Note: This website will be maintained and further updated despite the phasing-out of the ToS.
fire management programme that should have a key role in facilitating the free and open global transfer of knowledge”.

- Suggestion to seek the interest of UN Organizations to become involved.

In particular, the last point of the Forum recommendations stated:

- The ToS on Forest Fire to jointly prepare a set of possible organizational scenarios that will ensure that the successful work it has carried out so far will not be interrupted, creating a vacuum, but will rather become global with a new mandate and a different setup.

- Based on these scenarios, the leader of the Team will approach and seek the interest of UN organizations. The results of the consultation could be discussed at a ToS meeting to be organized before July 2014.

At the joint seventy-first session of the UNECE Committee on Forests and the Forest Industry (COFFI) and the thirty-seventh session of the FAO European Forestry Commission (EFC) (“Metsä 2013”), held in Rovaniemi, Finland, in December 2013, the ToS Leader convened a side event entitled "UNECE/FAO Forum on Cross-boundary Fire Management 2013: Results", in which the outcomes of the Forum were reported and inputs solicited from attendees to define the way forward.²

15. For technical reasons it must be noted that between the initiation and preparation of the Forum and its follow-up process there is an inconsistency of wording between the originally expected and the finally achieved outputs of the Forum. This development reflects an open, participatory and dynamic process of consultations between high-level wildland fire experts from UNECE Member States and other countries. The original wording of the grant called for developing, (a) "draft SOPs or guidelines for international cooperation in fire management (ground, aerial)", and (b) a proposal for a, "voluntary or legal protocol on cross-boundary cooperation in fire management" and this provided the mandate for the work of GFMC and an international group of project advisors (Australia, France, Germany, Spain, United Kingdom, USA). During intensive discussions on the feasibility of developing SOPs or guidelines for international cooperation, a first proposed concept emerged and was entitled, "International Wildfire Support Mechanism" (IWSM). The IWSM was originally envisaged to develop guidelines for international inter-operability and for international cooperation in addressing wildfire emergencies on the ground. However, the consultations revealed that the international community was not yet ready for such operational standards addressing joint wildfire emergency management. The products emerging from the Forum and the follow-up process, therefore, concentrated on the finalization of the "International Fire Aviation Guidelines, incorporating the International Manual of Common Rules for Fire Aviation". The Fire Aviation Guidelines, which were

² Note: Part of the presentation of the activities of the ToS on Forest Fire in the "Rovaniemi Action Plan for the Forest Sector in a Green Economy" includes pledges by the GFMC to support the following possible actions: (a) maintain and strengthen wildfire early warning and monitoring capacities, and promotion of integrated fire management approaches, i.e. the targeted extraction of biomass for both renewable energy provision and the reduction of wildfire hazard; and the integration of communities / private forest users in the achieving these goals at local level (Action B.3.5); (b) commission research on forest resilience in relation to the impacts of climate change on “events” such as ... fires (Action B.3.6), and (c) Organise a regional forum on forests and human health to review the situation, opportunities and challenges including the specific hazards and risks (e.g., air pollution from forest and other vegetation fires affecting human health and security) (Action D.3.1)
developed by the associated "International Fire Aviation Working Group" (IFAWG), have a strong operational character. The "ground" dimension of international cooperation in fire management, however, has been designed to advance national capacities in fire management through the exchange of expertise between nations under the umbrella of the proposed "International Wildfire Preparedness Mechanism" (IWPM).

16. In 2014 a strategy paper, "Follow-up to the UNECE/FAO Regional Forum on Cross-boundary Fire Management" was developed by the project advisory group and a core working group of the ToS on Forest Fire (participating UNECE Member States: Canada [for the Fire Management Working Group of the FAO North American Forestry Commission], Germany, Greece, FYR Macedonia, Russia, Turkey, Ukraine and the United Kingdom). The paper was based on consultations about future cooperation between the FAO, Green Cross International (GCI), the European Forest Institute (EFI) with its start-up project for the creation of a European Forest Risk Facility (feasibility study, sponsored by the Government of Germany), and the OSCE.

17. Following the final meeting with members of the ToS on Forest Fire in June 2014 at the GFMC, in conjunction with the Joint Meetings of the Global Wildland Fire Network and the UNISDR Wildland Fire Advisory Group, the “International Fire Aviation Guidelines” and the proposed concept of the "International Wildfire Preparedness Mechanism" (IWPM) were finalized and published on the preliminary website of the IWPM. Other documents that have been prepared during the Forum project are available on the IWPM website.

IV. Next steps

18. After the termination of the Forum project and the mandate of the ToS on Forest Fire (31 July 2014) the GFMC will continue to follow-up on the recommendations of the Forum during the coming years.

19. The GFMC will act as Interim Secretariat of the IWSM and will continue to expand the work of the former ToS on Forest Fire to other regions globally, such as the recently accomplished regional fire management training courses for the ASEAN region (in the frame of the Korean – ASEAN Forestry Cooperation Landmark Programme, Republic of Korea, September 2014), and for the South Caucasus and Western Balkan countries (in the frame of the OSCE and their Environment and Security (ENVSEC) Initiative, Turkey, October 2014).

20. Discussions on cooperative arrangements between the GFMC, acting as Secretariat of the IWPM and the Global Wildland Fire Network, with the FAO, the European Forest Risk Facility start-up project and with GCI are ongoing and will be continued in 2015.

21. There are very promising experiences and prospects for continuing the work of the ToS on Forest Fire in the priority region of Eastern Europe, Southeast Europe, the South Caucasus and Central Asia under the auspices of the OSCE and the European and Mediterranean Major Hazards Agreement (EUR-OPA) of the Council of Europe. The GFMC has provided inputs to the 22nd OSCE Economic and Environmental Forum, "Responding to Environmental Challenges with a View to Promoting Cooperation and Security in the OSCE Area" (Vienna, January 2014; Prague, September 2014) in preparation for the OSCE Ministerial Council Meeting

3 http://www.fire.uni-freiburg.de/IWPM/
in Basel, Switzerland, in December 2014, during which a ministerial decision of the 57 OSCE member states is expected on the future role of the OSCE in regional disaster risk reduction, which would include fire management.