

7<sup>th</sup> International Wildland Fire Conference Facing Fire in a Changing Word Campo Grande, Mato Grosso, Brazil 28 October – 01 November 2019

# The Global Wildland Fire Network and the UNISDR international Wildfire Preparedness Mechanism (IWPM):

#### **Advances and Prospects**

Johann Georg Goldammer, Nikola Nikolov, Sergiy V. Zibtsev Oyunsanaa Byambasuren, Bambang Hero Saharjo, Evgeni Ponomarev

Global Fire Monitoring Center (GFMC)

Regional Fire Monitoring Centers / Fire Management Resource Centers SE Europe, Eastern Europe, Central Asia, Central Eurasia, SE Asia













#### Recommendations of the

#### "UNECE Regional Forum on Cross-boundary Fire Management"

Geneva, 28-29 November 2013

Establishment of Voluntary International Cooperation Mechanisms
With Participation of Belarus and Ukraine













#### Recommendations of the UNECE / FAO Forum

Development of the International Wildfire Preparedness Mechanism (IWPM)

- The IWPM provides a voluntary framework from which to cascade improved knowledge, good practice, experience and training globally
  - Sharing of fire management expertise across borders
  - Application of standard training materials
  - Development of common SOPs for enhancing crossboundary inter-operability in fire management, especially in wildfire emergencies

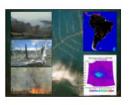


#### The Global Wildland Fire Network

#### 14 Regional Wildland Fire Networks











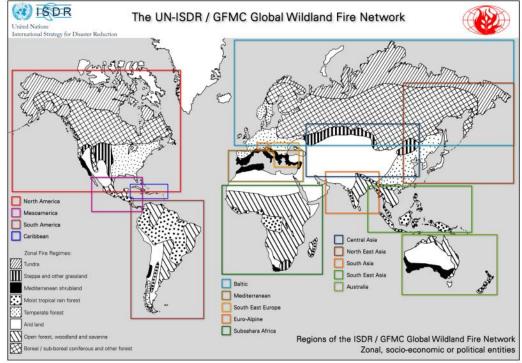




















Regional Wildland Fire Networks within the Global Wildland Fire Network
North America – Mesoamerica – South America – Caribbean – Mediterranean
Southeast Europe / Caucasus – Subsahara Africa – South Asia – Southeast Asia
Australasia – Northeast Asia – Central Asia – Euro-Alpine

### Functions of "Regional Fire Monitoring Centers" (RFMC) / Regional Management Resource Centers" (RFMRC)

- > Advisory support to nations and to the regional organizations:
  - Development and implementation of fire management policies
  - Support of participating countries of the region to develop informal or formal agreements / protocols for cross-boundary cooperation in fire management

### Establishment of Regional Fire Monitoring / Fire Management Resource Centers (I)

 2010: Establishment of the first Regional Fire Monitoring Center: Southeast Europe / Caucasus Region (RFMC) (Skopje, FYR Macedonia)



 2013: Eastern Europe Regional Fire Monitoring Center (REEFMC) (Kyiv, Ukraine)



 2015: Regional Fire Management Resource Center in Central Asia (RFMRC-CAR) (Ulaanbaatar, Mongolia)



### Establishment of Regional Fire Monitoring / Fire Management Resource Centers (II)

- 2017: Regional Fire Management Resource Centers in South East Asia (RFMRC-SEA) (Bogor, Indonesia)
- 2017 / 2019: Regional Central Eurasia Fire Monitoring Center and Russia (Krasnoyarsk)
- 2017: Decided but not yet opened: Regional Fire Management Resource Centers in South America (RFMRC-SAR) (Santiago, Chile, and Gurupí, Brazil)



рский научный центр Сиб Российской академии

Региональный Regional Eurasia

центр мониторинга Fire Monitoring пожаров Евразии Center



 2019: Negotiations initiated for Eastern Subsahara Africa (Madagascar) and Eastern Asia (Harbin, P.R. China)

#### The Global Wildland Fire Network

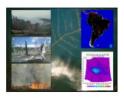
#### 14 Regional Wildland Fire Networks

and 6 Regional Fire Management Resource Centers 🛨













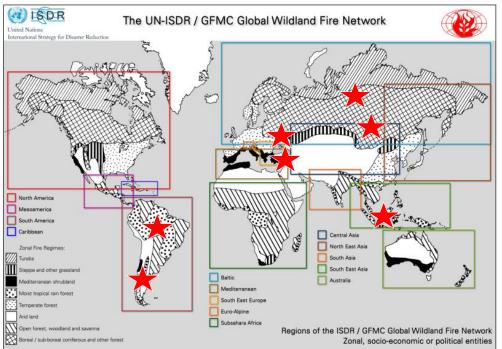












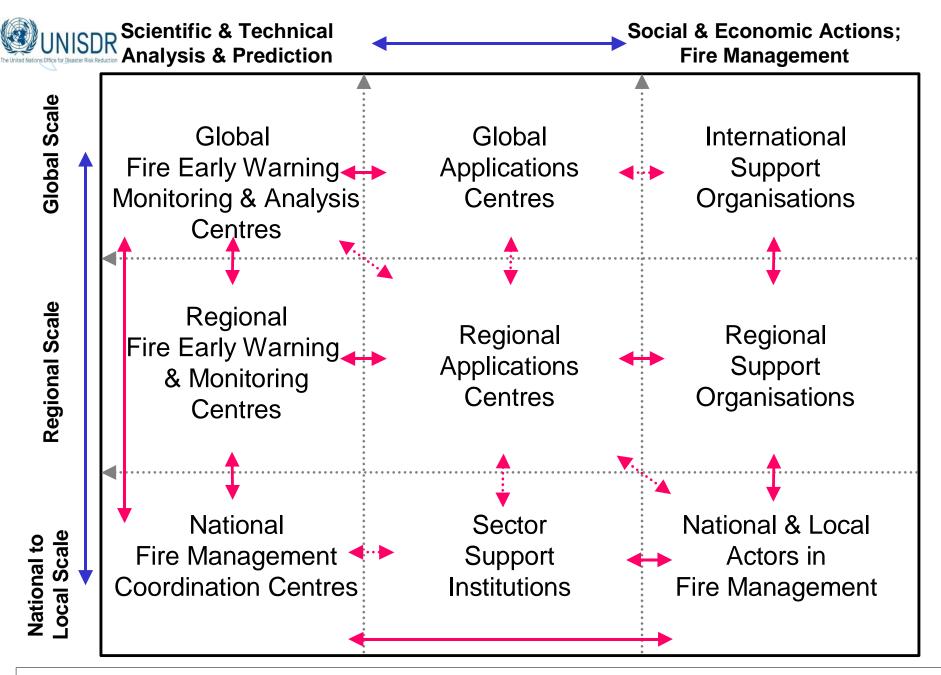




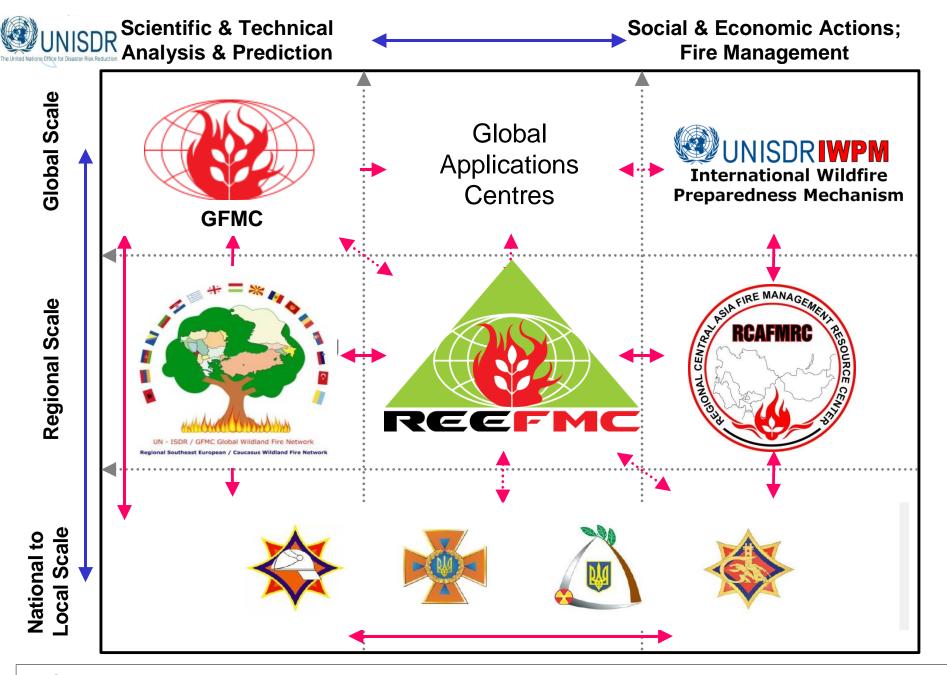




Regional Wildland Fire Networks within the Global Wildland Fire Network North America - Mesoamerica - South America - Caribbean - Mediterranean Southeast Europe / Caucasus - Subsahara Africa - South Asia - Southeast Asia Australasia - Northeast Asia - Central Asia - Eurasia - Euro-Alpine



Sharing of Information and Resources within the Global Wildland Fire Network – 2001



Sharing of Information and Resources within the Global Wildland Fire Network – 2018

#### Activities 2016 (I)





- SE Europe / Western Balkans (2-phased)
   2016: Republic of North Macedonia and Western Balkans
  - ➤ National Round Table on Fire Management: Consent on formation of an inter-agency task force and a national fire management policy (November 2106)





#### Activities 2016 (II)





- ➤ First Regional Consultation on Cross-boundary Cooperation in Fire Management (11 September 2016, Ministry of Agriculture, Forestry and Water Economy, Republic of North Macedonia)
- Participating countries: Albania, Bulgaria, Greece, Kosovo, the Republic of North Macedonia and Serbia.
- A number of detailed actions agreed





#### Activities 2016 (III)









Regional Fire Monitoring Center

United States Department of Agriculture

#### North Macedonia and Serbia

- Seminar "Enhancing of Ground and Aerial Forest Fire Suppression Capacities" in the Republic of Macedonia, sponsored by U.S. Forest Service (September 2106)
- > Revealing deficits in inter-agency cooperation





#### Activities 2016 (IV)



















First International Fire Management Week Islamic Republic of Iran



- Introduction of Iran to the Regional Wildland Fire Networks of SE Europe / Caucasus and Central Asia
- > Introduction of the EuroFire Competency Standards in Parsi (Persian)

### **EuroFire**







#### Activities 2016 (V)

In recognition of the need to enhance preparedness and interoperability of South American countries for fire emergency situations

- First Regional Consultation on Cross-boundary Fire Management (Republic of Uruguay, May 2016)
  - Participating countries: Argentina, Brazil, Chile, Paraguay, Uruguay



## First Regional Consultation on Cross-boundary Fire Management (Republic of Uruguay, May 2016)

➤ Introduction of the EuroFire Competency Standards and Training Materials in Spanish and Portuguese (Brazilian)

➤ Introduction of the International Fire Aviation

Guidelines



Estándares de Competencias y Materiales de Entrenamiento ersión en Español para América Latina y el Carib

#### Activities 2016 (VI)



### 3-4 October 2017: Regional Consultation on Transboundary Cooperation in Fire Management

- 10 South American Countries attending with representation at high level
- Initiation of the formal dialogue between government agencies
- Recommendation for the establishment of the Fire
   Management Resource Center South America Region





#### Activities 2017 (I)

#### **Ukraine**

#### Objectives:

- ➤ Enhancing the national interagency and international crossboundary dialogue and inter-operability in fire management in Ukraine and neighboring countries of Eastern Europe
- Development of recommendations for fostering the national inter-agency and civil society cooperation in fire management, notably address agricultural burning as the main cause of wildfires affecting the landscape and source of atmospheric pollution









#### Results

- First National Round Table on Fire Management Fires in the Natural and Cultural Landscapes of Ukraine: Towards the Development of a National Fire Management Policy, (25 October 2017 at the Regional Eastern European Fire Monitoring Center – REEFMC)
- ➤ A number of detailed recommendations / actions proposed are focusing on proposals for changing legislation concerning agricultural burning





#### Follow-up in 2018

- Analysis of existing national legislation related to agricultural burning and it social, economic and environmental consequences.
- ➤ Preparation of legislative initiatives for Ukrainian Parliament (Verkhovna Rada) on improving national situation with agricultural burning in Ukraine based on results of the National Round Table on the matter held in October 2017 in Kyiv.
- > Follow-up Second Round Table in 2019



#### Activities 2017 (II)

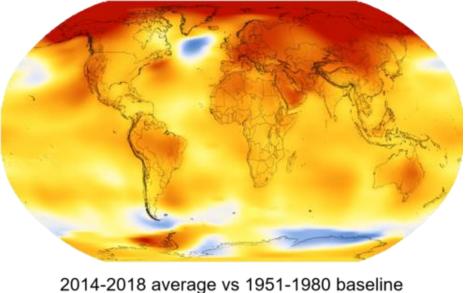


International Conference *Protection of Human Settlements* and Social Infrastructure from Wildfires, Moscow, Russia

(November 2017)

Temperature Change in the Last 50 Years





2014-2018 average vs 1951-1980 baseline -2°C -1°C 0°C +1°C +2°C











#### Activities 2018 (I)

- ➤ An extreme wildfire affected the peri-urban area of Athens on 23 July 2018 the community of Mati
- ➤ 102 people killed, 150 injured
- > Around 1500 houses / structures burned or damaged
- Immediate response by the government to reorganize / reform fire management and the civil protection system







#### Activities 2018 (I)



- Prime Minister Tsipras called for assistance of GFMC
- Meeting and agreement on 23 August 2018 to establish an independent Commission on the Future of Fire Management in Greece, chaired by GFMC in its function of EUR-OPA Specialized Center, with a Core Team of 5 Greek Scientists
- ➤ Working with >70 experts and 28 agencies of Greece
- Report for reorganizing fire management in Greece to be submitted to the Hellenic Parliament in February 2019





#### Activities 2018 (I)





The Strategic Plan for Landscape Fire Management in Greece:

- Core of the reform: Establishment of an independent "Landscape Fire Management Organization" (LFMO)
- > Advisory, coordinative and supervisory role in landscape fire management in the country with the main mission to develop an interagency National, Landscape Fire Management Plan and to monitor and follow up its application.
- > The organization will support the continuous and substantial effort to prevent fires and shall guarantee the necessary collaboration and interaction between the actors involved

#### Activities 2018 (II)



### Establishment of the Eurasian Team of Specialists in Landscape Fire Management

➤ Decision of the Joint Meeting of the Committee of Permanent Correspondents and Directors of the Specialized Centers (Paris, November 2017)

#### **Mandate**

➤ Provision of scientific-technical expert advice and guidance of governments and specialized agencies of Europe, with emphasis on the regions of Eastern Europe, South Caucasus and Central Asia, in developing national fire management policies and derived implementation strategies and action plans

#### Activities 2018 (II)





### Establishment of the Eurasian Team of Specialists in Landscape Fire Management

- ➤ Kick-off / launching meeting at GFMC on 12 October 2018
- Core Team: Leaders of Regional Fire Management Resource Centers and Networks in SE Europe / Caucasus Eastern Europe and Central Asia











#### Activities 2019 (I)

#### Strengthening Regional Governance in Fire Management

- Example of joint work with the OSCE in the frame of the project "Improving Radiological and Environmental Awareness in Territories Affected by the Chernobyl Accident in Belarus and Ukraine with a Focus on Wildfire Management"
- > Table-top exercise in Gomel, Belarus (May 2018)









#### Activities 2019 (I)

#### **Strengthening Regional Governance in Fire Management**

Preparation of Guidelines and Terminology and Fire Management in Radioactively Contaminated Terrain









Publication of public awareness materials





#### Activities 2019 (II)

#### **Strengthening Regional Governance in Fire Management**

- ➤ Formal opening of the Regional Eurasia Fire Monitoring Center at the Federal Research Center «Krasnoyarsk Science Center SB RAS» (27 August 2019)
- Региональный центр мониторинга пожаров Евразии (Федеральный научный центр «Красноярский научный центр Сибирского отделения Российской академии







#### **Concluding Remarks**

- > This report presented only selected activities
- More activities are highlighted in other presentations for instance by the next report from the South East Asia Center (Prof Bambang)
- Please attend the Global Session tomorrow for more detailed reports and recommendations for action from all continents



### **GFMC** Website:

http://gfmc.online/

#### **Global Wildland Fire Network:**

http://gfmc.online/intro/about.html



7<sup>th</sup> International Wildland Fire Conference
Facing Fire in a Changing Word
Campo Grande, Mato Grosso, Brazil
28 October – 01 November 2019

#### **Thanks for Your Attention**

