

**Evaluation of Questionnaires submitted by Members of the
Team of Specialists on Forest Fire**

15 February 2012 – Revised 20 March 2012

Information by respondents: By countries, in alphabetic order

1. Name and position/title (please refer to the note above should you wish to remain anonymous).

01-Belarus: Mr. Vladimir V. Usenia, PhD, Professor, Deputy Director, Forest Institute of the National Academy of Sciences of Belarus

02-Canada: Mr. William J. (Bill) de Groot, PhD, Fire Research Scientist, Fire and Climate Change Research Team Leader, Great Lakes Forestry Centre, Natural Resources Canada - Canadian Forest Service

03-Croatia: Mr. Goran Videc, Head of Department

04-FYR Macedonia: Mr. Nikola Nikolov, PhD, Professor, Faculty of Forestry, Skopje

05-Lithuania: Mr. Zbignej Glazko, Chief Desk Officer

06-Russia: Mr. Andrey Eritsov, Deputy Chief, Aerial Forest Fire Center, Russia

07-Serbia: Ms. Vidosava Jovanovic, Senior Adviser, responsible for forest protection, Ministry of Agriculture, Trade, Forestry and Water Management, Directorate of Forests, Republic of Serbia

08-Spain: Mr. Rafael Gómez del Álamo, Head, Spanish Forest Fire Service, Ministry of Environment, Rural and Marine Affairs, Spain.

09-Turkey: Mr. Ertugrul Bilgili, PhD, Professor, Department of Forest Entomology and Protection, Faculty of Forestry, Karadeniz Technical University, Trabzon

10-U.S.A.: Mr. Dale Dague, USDA Forest Service, Fire and Aviation Management

11-Ukraine: Mr. Sergiy Zibtsev, PhD, Professor, National University of Life and Environmental Sciences of Ukraine

12-Germany: Mr. Johann G. Goldammer, PhD, Professor, Global Fire Monitoring Center (GFMC)

Team Leader (TL) Summary

The total ToS Forest Fire is comprising of the following officially nominated or invited members:¹

- Government agencies: **21 countries**
- International Organizations / NGOs: **3**
- Reply rate: **57%**

Note: The reply rate to this questionnaire refers to the total number of 21 member countries. The country of the TL (Germany) was intentionally excluded in the first evaluation in order not to bias the survey. However, in the update of the evaluation the replies of Ukraine and in some points the opinion of Germany were included. All comments have been inserted in this evaluation form in its original wording (only a few spelling corrections have been made). The original replies are on file at the UNECE Forestry and Timber Section and at GFMC.

TL Comment

Most have nominated alternate focal points, bringing the total number of addresses in the distribution list to 34. At the inauguration meeting in 2009 only 6 members were able to attend. Since then no full-scale meeting was called because of general lack of funding for travel to general Team meetings. Instead, numerous side meetings have been held at various occasions, in order to economize travel costs and time. Dedicated meetings have been held notably through

¹ Detailed ToS Member list: <http://www.fire.uni-freiburg.de/intro/UNECE-FAO-ToS-Forest-Fires-Address-List.pdf>

the Regional Wildland Fire Networks. Please see comments at the end of this summary review.

2. Of which ToS are you a member? All are members of the Team of Specialists on Forest Fire

3. How long have you been a member of this ToS?

01-Belarus: 5 years

02-Canada: 3 years

03-Croatia: 3 years

04-FYR Macedonia: 7 years

05-Lithuania: 1 year

07-Serbia: 3 years

08-Spain: 3 years

09-Turkey: over 10 years

10-U.S.A.: -

11-Ukraine: 4 years

12-Germany: 30 years

4. In your position, do you have a direct influence on the implementation of the outcome of the ToS work in your country? Please elaborate.

01-Belarus: The outcome of the ToS work is used for the application of modern-day means for forest fire monitoring and control in practice of forest fire management in our country.

02-Canada: In my position as Fire Research Team Leader and through activity on international fire projects, I provide recommendations to federal government managers on national and international fire research priorities and collaborations.

03-Croatia: Yes, I have through the development of national legal framework.

04-FYR Macedonia: Yes, I have.

05-Lithuania: Partly. I have a possibility to present the outcome of the ToS work for decision-making persons.

06-Russia: Yes, there is direct influence on the implementation of the outcome of the ToS. It is distributed printed materials all over Russia, highlighted achievements in national meetings and seminars.

07-Serbia: Yes, I have.

08-Spain: Yes I do. The Spanish Forest Fire Service coordinates the Wildland Firefighting Committee, a technical committee where all the regional governments together with the central government discuss and elaborate national guidelines on forest fires.

09-Turkey: Yes, I collaborate with the forestry service in Turkey to coordinate and implement fire training programs and establish a National Fire Danger Rating System.

10-U.S.A.: Advisory role

11-Ukraine: Yes. The conclusions and recommendations of ToS related to measures for risk reduction of catastrophic forest fires in contaminated by radionuclides areas are under consideration in Ministry of Emergency of Ukraine. Official agreement signed about collaboration between GFMC and Emercom Ukraine related to radioactive fires elimination.

12-Germany: Yes, I have.

TL Summary & Comment

All respondents confirm that they have a role / influence at national level to implement the outcomes of the ToS work in their home country.

Personal Motivation/inputs

5. What is your main motivation in participating in the work of the ToS?

Please provide list and rank each item from 1 to 5 (1 being lowest motivation, 5 highest motivation).

Av = average rating of motivation

- Expert exchange of experiences and lessons learnt: 5, 5, 5, 5, 5, 5, 5, 4, 1, 5, 5 Av 4,6
- Input to policy dialogue: 4, 5 (providing scientific input), 4, 4, 2, 5, 4, 3, 4, 5, 5 Av 4.1
- Tangible outputs such as publications/reports/strategies: 3, 4, 2, 4, 2, 4, 4, 3, 4, 5, 5 Av 3.6
- Exchange with other members of the same ToS: 4, 5, 4, 5, 4, 5, 5, 4, 5, 5, 5, 5 Av 4.7
- Exchange with members of other ToS: 3, 3, 2, 4, 2, 3, 5, 3, 2, 2, 3, 4 Av 3,0
- Contribution to the regional input at global level: 4, 5, 3, 5, 2, 5, 5, 3, 4, 2, 5, 5 Av 4,0
- Receive input/guidance for implementation at national level: 4, 4, 3, 5, 3, 5, -, 4, 4, 5,5 Av 4.0
- Capacity building (training of trainers): 2, 3, 3, 4, 2, 5, 3, 3, 4, 5, 5, 5 Av 3.7
- Contribution to the UNECE/FAO programme of work: 5, 5 (representing scientific contributions from Canada and IUFRO Forest Fires Unit), 3, 5, 2, 5, 5, 4, 3, 3, 5, 3 Av 4.0
- Others (please specify):
- **01-Belarus:** There is a need to maintain closer contacts with other members of ToS and provide closer overall co-ordination of work among the ToS members.
- **11-Ukraine:** To be in a mainstream of fire policy and science and to assist in bringing latest knowledge, technologies and expertise in the area to Ukrainian education and fire fighting practice. Very important point – to receive latest updating – regional satellite images, forecasting, other support during fire emergencies that usually requested by Ukrainian authorities. Example – GFMC were requested for satellite image during critical situation in Ukraine 1 of August about source of heavy smoke in Kiev city as it was supposed that peat fires burning in Chernobyl exclusion zone.

TL Summary

Highest average rating of motivation: Exchange with other members of the same ToS

High average rating of motivation: Policy dialogue, input/guidance for implementation at national level and UNECE/FAO Programme of Work

Lowest average rating of motivation: Exchange with members of other ToS

TL Comment

The lowest rating is of interest when evaluating the cross-sectoral work of different ToS (see TL comment under Items 31 and 33):

6. What is your present specific contribution to the ToS?

Please answer “yes” or “no” to the following.

- Leading the ToS: yes: 3 (TL + 2 deputies)
- Actively participating in the ToS meetings: yes: 9, no: 3
- Following the activities of ToS without active participation: yes: 4, no: 5
- Contributing with own technical inputs/expertise: yes: 8, no: 4
- Co-organising meetings as host: yes: 6, no: 5
- Helping in dissemination of results (outputs?) of ToS: yes: 10, no: 1
- Other contributions (please specify):

TL Summary

Highest frequency of ToS member activity / contribution: Helping in dissemination of results / outputs of ToS and active participation in the ToS meetings

Lowest frequency of ToS member activity / contribution: Co-organising meetings as host

TL Comment

Co-organising meetings as host indeed is restricted to a few ToS Members only. In principle the availability of ToS Members to host an activity has been expressed to the TL by many.

Organisation of team/leadership

7. How are you organised at the national level in preparing the ToS meetings and sharing results at national level?

01-Belarus: A state forest administration body shares the results of meetings of the ToS with its departmental organisations.

02-Canada: Summarize meetings to national-level colleagues

04-FYR Macedonia: Before and after each ToS meeting, an informative meeting with the stakeholders in the country is organized.

06-Russia: The Organization Aerial Forest Fire Center is belonging to the Federal Forest Agency and is responsible for data collection and for sharing results between Federal and regional agencies.

07-Serbia: After each meeting of the ToS, the information is forwarded to the forestry sector.

08-Spain: At the Spanish Forest Fire Service there is a team of people specialized in international issues. This team develops a previous work analyzing and preparing documentation related to the meetings. We provide inputs and comments whenever we are asked to do so. Regarding the sharing of results at national level, in Spain the most effective tool we have and use is the Wildland Firefighting Committee. This Committee meets twice a year. The Spanish Forest Fire Service includes in the agenda any international output of interest for the regional governments, which have the competences in their territories.

09-Turkey: Mostly personal preparations. In cases where national programs are involved, there is usually a consultation with the officials at the Forestry Service (General Directorate of Forestry).

11-Ukraine: Yes. In Ukraine we work closely with two authorities responsible for fire management – State Agency of forest resources of Ukraine (representative – member of ToS) and Emercom Ukraine. National University of Life and Environmental Sciences of Ukraine (representative – member of ToS) lead scientific and organisational part of work. In this work actively involved regional forestry authorities like Crimean Autonomous Republic - as fire risks are very much vary on territory of the country.

12-Germany: Main emphasis is on publication of ToS activities via internet (GFMC website: ToS web page and web pages of the Regional Wildland Fire Networks)

TL Summary / Comment

All replies confirm that there is active feedback at national level with agencies concerned.

8. Do you think you are receiving sufficient support from your own country to participate in these teams? What kind of limitations has your team experienced as regards participation of team members in your events (insufficient funding, lack of members' interest etc.), if any?

01-Belarus: I receive insufficient support from our country to participate in the events of the team.

02-Canada: No limitations up to present

03-Croatia: No - insufficient funding

04-FYR Macedonia: Yes, I do. The main limitation is lack of finances.

06-Russia: Insufficient Funding.

07-Serbia: Yes I do. The main limitation is lack of finances.

08-Spain: We are receiving enough support as the central government, through the Spanish Forest Fire Service, has the exclusive competence in international relations on forest fires. On the other hand in the past two years we have faced some budget restrictions that are affecting our travelling possibilities.

09-Turkey: No, the support and encouragement I have received has been great. But there are some problems concerning the assignment of the ToS member from the Forestry Service. The usual practice for the appointment is that the division director becomes the member of ToS. The problem is that these positions change hands quite often (3 to five years).

10-U.S.A.: yes

11-Ukraine: We receive full support from both national forest fire authorities in distribution and implementation of knowledge and legislation improvements as well. Funding is a largest problem for

current activity. Would be great to receive a support from ECE/FAO for creating of web-site reflected activity of ToS in Ukraine and other countries.

12-Germany: Since 1988 Germany has actively supported the work of the ToS, starting with the first edition of UNECE/FAO International Forest Fire News (1988) and establishment of the Secretariat of the ToS in 1993 at GFMC. While the GFMC provided financial support in the magnitude of \$US 50-100,00 annually, there was limited support by third sources. For several years the production of IFFN was financially supported by UNECE, late by the U.S. Bureau of Land Management (BLM), this financial support from third sources has expired completely since several years.

TL Summary

Most replies do not distinguish between the support in the sense of institutional acceptance and support in principle, and financial support. Out of the ten replies:

General support provided: 8

No or insufficient general support provided: 2

Lack of financial support: 8

TL Comment

75% of the replies report lacking financial support. Personal communication with all Team Members over the years revealed a tentatively similar average. Main finances for the work of the ToS are provided by the Team Leader through the GFMC. Financed by Freiburg University until 1990, and since 1990 / ongoing by the Max Planck Society for the Advancement of Sciences. Total funding for the work of the ToS by Germany are in the magnitude of \$US 1 to 3 million (investments for the ToS and the enlarged work of GFMC cannot be separated clearly).

9. How would you suggest that these shortcomings be overcome?

01-Belarus: Financing of participation in the work of the ToS should be purpose-oriented.

02-Canada: NA

03-Croatia: Partial funding by UNECE

04-FYR Macedonia: Some kind of fund for support should to be established in the frame of UNECE/FAO.

07-Serbia: Maybe funds for support must be provided.

08-Spain: Financial support for at least one specialist from each country/institution will help to assure an extensive exchange of opinions in the ToS meetings.

09-Turkey: The officials may be asked to assign somebody who is eager and willing to work in the ToS. This person may be somebody preferably a technical personnel other than division heads.

11-Ukraine: The most important is involving heads of abovementioned authorities in activity, during pan-European events and meeting of ECE/FAO. Personal meetings of top representatives of ECE/FAO Forestry and Timber Section should be organised with leaders of agencies that are responsible for forest fires to stimulate better interest for activity.

12-Germany: Most countries could not attend meetings and other activities if not financed by GFMC.

TL Summary / Comment

Six of nine replies suggest funding to overcome shortcomings. One proposal suggests appointment of focal points on a more sustainable level, i.e. a representative from a technical level instead of higher-level officers who have a faster turn-around period and are less sustainable.

10. How do you share information from the ToS work within your own country?

01-Belarus: The information is delivered to the state forest administration body.

02-Canada: Discuss at team meetings

03-Croatia: Report to the stakeholders

04-FYR Macedonia: As I said, before and after each ToS meeting, an informative meeting with the stakeholders in the country is organized.

06-Russia: Preparing Reports.

- 07-Serbia:** After each meeting of the ToS, the information is forwarded to the forestry sector
- 08-Spain:** Please refer to the answer of question number 7 to find out about the information sharing with the regional governments. Further more, we share all the international interesting information with other colleagues at national level (Forest Policy Service of the Ministry of Environment, Rural and Marine Affairs; Civil Protection of the Ministry of the Interior; Emergency Military Unit of the Ministry of Defence).
- 09-Turkey:** Through personal communication and training programmes.
- 10-U.S.A.:** Distribute to appropriate personnel
- 11-Ukraine:** By invitation on conferences and workshops, personal meetings, e-mailing latest news and events, publication in news papers, interview to national media.
- 12-Germany:** Publication in IFFN and GFMC website.

TL Summary / Comment

All replies reveal that ToS members are sharing information with agencies concerned.

11. What have been the resource implications to implement ToS work by your team? How much time and effort did you contribute to the ToS work? What about other resources?

- 01-Belarus:** Normally I contribute my leisure time to the ToS work.
- 02-Canada:** About 1 week of my time per year plus travel funding; offset by having joint multiple-purpose meetings
- 08-Spain:** The team of international specialists is composed of 3/4 people.
- 09-Turkey:** Training and exercises. At least two-three weeks a year.
- 11-Ukraine:** Collaboration with ToS require regular efforts during year – providing national fire information, preparing publication, participation in meetings and field works, training, lectures etc. Other resources than time and team members efforts are very much limited.
- 12-Germany:** GFMC has provided major inputs since 1988, averaging in at least a half-time senior staff position.

TL Summary / Comment

Time invested varies. Replies reveal the broad range of resources, involvement, e.g.

- Answer 01 is rather representative for many or most Team Members who are spending time on top of their normal professional / job duties
- Answers 02 and 09 reveal Team activities in the frame of joint meetings and outreach work of the Team
- Answer 08 shows a high commitment of a country in which international cooperation in fire management is highly rated and personnel resources available
- Answer 11 reveals a continuous involvement of a Team Member.
- Answer 12 is not representative since the Team Leader is responsible for the main activities of the Team

Although only 6 countries replied it is estimated that out of the total Team Member organizations (21 countries and 3 NGOs) about 30% are actively working in international cooperation in fire management and thus institutional, personnel and financial resources are available, regularly budgeted and thus element of national policy.

12. Would you consider language as a “critical problem” in your meetings, since ToS meetings do not normally benefit from full translation? If yes, what would you propose to mitigate this communication problem?

01-Belarus: I consider that language is a critical problem in our meetings. Therefore it is essential that financial sources should be found to provide translation for the ToS meetings.

02-Canada: Not an issue for me as all are conducted in English, but likely is a problem for some others

03-Croatia: No

04-FYR Macedonia: No, I don't think that is problem.

07-Serbia: No problem.

08-Spain: Language is an important issue when we talk about international affairs. We consider English should be the language for the meetings. We would appreciate translation into Spanish of the main relevant documents generated in the meetings. This would help us very much to spread the results in our country.

09-Turkey: Yes, sometimes. I do not have an immediate answer but sufficient funding may solve some problems.

11-Ukraine: Yes, translation into Ukrainian or Russian would really help to extend distribution of results of activity of the ToS.

12-Germany: No problem.

TL Summary

Language is a problem: 3

Language is not a problem (English recognized as key language): 6

Solutions needed, e.g. simultaneous translation or translation of documents: 5

TL Comment

The answers do not consider that the national and regional outreach activities under the umbrella of the ToS, in which a larger audience is involved (not only ToS Members), translation in most cases has been provided.

13. How do you assess the leader/guidance of your ToS?

On question 13, please provide list, ranking each item 1 (lowest quality) to 5 (highest quality):

02-Canada: Rank 5 for all – Prof Goldammer has made an immense personal and professional commitment to lead this ToS.

06-Russia: Annual meetings, telephone conferences, e-mail exchanges

07-Serbia: Excellent !

09-Turkey: He has been a great team leader.

11-Ukraine: Directly by e-mail or phone calls, monitor the GFMC website.

12-Germany: (no self-assessment of leadership by TL)

- Overall guidance: 5, 5, 3, 5, 5, 4, 5, 5 Av 4.6
- Sharing of information and stepwise results: 5, 5, 4, 5, 5, 5, 4, 5, 5 Av 4.8
- Scheduling and planning events: 4, 5, 2, 5, 5, 5, 3, 5, 5 Av 4.3
- Reporting/dissemination of results of ToS: 4, 5, 3, 5, 5, 5, 2, 5, 5 Av 4.3
- Organisation of events: 4, 5, 4, 5, 5, 5, 3, 5, 5 Av 4.6
- Output/result of the ToS: 4, 5, 3, 5, 5, 5, 2, 5, 5 Av 4.6
- Reporting to UNECE/FAO: 4, 5, 4, 5, 5, 5, -, 5, 4 Av 4.6
- Others (please specify):
- Total average rating: Av 4.54

TL Summary

Highest average rating of leadership / guidance: Sharing of information and stepwise results (4.8)

Lowest average rating of leadership / guidance: Reporting/dissemination of results of ToS and Output/result of the ToS (4.3)

Total average rating of leadership / guidance: 4.54

14. Do you think that the ToS mandate, as expressed in the ToR, is clear for the team leader/co-leaders concerning planning, operational, communication matters, including reporting to UNECE/FAO?

01-Belarus: Yes, the ToS mandate is clear for the team leader/co-leaders concerning planning, operational, communication matters, including reporting to UNECE/FAO.

02-Canada: NA – this is a team leader question

03-Croatia: No, it should be more detailed

04-FYR Macedonia: Yes, I do.

06-Russia: Yes

07-Serbia: Yes

08-Spain: Yes

09-Turkey: Yes, I mostly think that it is.

11-Ukraine: Yes

12-Germany: Yes

TL Summary

Out of 9 replies 1 reply correctly states that this should be answered by team leaders. However, out of 8 answers 7 suggest that the mandate is clear for the TL's, one reply suggesting more details are needed.

TL Comment

For the TL the mandate is clear. The two Deputy TL's (04 and 06) have replied accordingly, thus, for the complete Team leadership the mandate is clear.

15. Are procedures for reporting back to UNECE/FAO clear enough? If not, how could they be improved?

01-Belarus: Yes, the procedures for reporting back to UNECE/FAO are clear.

02-Canada: NA – this is a team leader question

03-Croatia: Yes

04-FYR Macedonia: Yes, they are.

06-Russia: Clear enough.

07-Serbia: Yes

08-Spain: Yes

09-Turkey: I believe this is not for me to answer.

12-Germany: Yes

TL Summary

Out of 9 replies 2 replies correctly state that this should be answered by team leaders. However, out of 9 answers 7 suggest that the procedures for reporting back to UNECE/FAO are clear for the TL's.

TL Comment

The TL takes the opportunity to state that for the TL the procedures are clear. The two Deputy TL's (04 and 06) have replied accordingly, thus, for the Team leadership the reporting procedures are clear.

Thematic content of your ToS

16. In your opinion, which topics/themes of the ToS were appropriate and successful (=strong points of ToS) and should be continued for 2014-2017?

01-Belarus: In my opinion, the application of modern-day means and methods for forest fire protection in transboundary areas of neighbour states is the strong point of the ToS and should be continued for 2014-2017.

03-Croatia: East-West fire science dialogue; networking

04-FYR Macedonia:

- Inappropriate fire use in the agricultural and pastoral domain
- Fire management training

06-Russia: Develop

- international programs on transboundary fire management
- carbon emission reduction programs
- as well as sharing information on training of fire management personal and voluntary programs.

07-Serbia:

- Regional networks
- Inappropriate fire use in the agricultural and pastoral domain
- Fire management training

08-Spain: For the near future we consider as a priority the following topics:

- Standardization of resources terminology and personnel training to ensure an efficient and safe exchange of resources
- Implementation of the Incident Command System as the emergency management tool for forest fires
- Prevention of forest fires. Policies and financial mechanisms.
- Urban interface forest fires
- Coordination of the existing working groups on forest fires at European level

09-Turkey: The same topics should be pursued as they been built upon real fire problems of the regions with achievable and realistic objectives.

11-Ukraine:

- East-West fire science dialogue
- Supporting of Easter Europe countries in transition: Emphasis on science and technology transfer towards supporting development of advanced fire management and related policies
- Assessment and understanding of current fire problems in cultural landscapes
- Information support and assistance during emergency situations and related crises
- Networking
- Fire management in crisis ecological zones (radioactive contamination, chemical contamination)

12-Germany:

- See conclusions of this summary, which are in line

TL Comment / Summary

All replies confirm that the topics that are key issues in the planned “UNECE Regional Forum on Cross-boundary Fire Management”.²

² <http://www.fire.uni-freiburg.de/intro/UNECE-Fire-Forum-2011-Draft-Agenda.pdf>

17. Is all needed expertise in the ToS present, or is other expertise needed (may be from other sectors or disciplines) to better carry out the task of the ToS?

03-Croatia: Yes, it is present.

08-Spain: I think all the expertise needed is already included and represented among all the members of the ToS.

09-Turkey: I believe so.

11-Ukraine: All needed expertise in the ToS present.

12-Germany: Yes, especially through selected invited international organizations such as the satellite remote sensing community organized under the Fire Implementation Team of Global Observation of Forest and Land Cover Dynamics (GOF-C-GOLD).

TL Comment / Summary

The replies confirm that the expertise needed for the work of the Team is provided by the Team Members.

18. Do you consider exchanges and discussions within the ToS useful?

01-Belarus: Yes, I do. I believe the exchanges and discussions within the ToS are useful.

02-Canada: Absolutely

03-Croatia: Yes

04-FYR Macedonia: Yes, I do.

06-Russia: Yes

07-Serbia: Yes

08-Spain: Yes. It is very useful. It constitutes the starting point for developing guidelines and references for the ToS.

09-Turkey: Yes

10-U.S.A.: Yes, the exchange of knowledge and information between North America and the European countries is a key benefit of our participation.

11-Ukraine: Very much!

12-Germany: Yes

TL Summary / Comment /

All replies confirm that the exchanges and discussions within the ToS are useful / beneficial. This includes remarks by the focal points of the North American Member States, especially the remark by the U.S.A. that *“the exchange of knowledge and information between North America and the European countries is a key benefit of our participation”*. This is important from the point of view of the necessary exchange of experience between North America and Europe – a unique arrangement in the UN system and the Global Wildland Fire Network respectively.

19. What have been the deliverables and main outputs of the ToS? What impact have they made? Rank the technical quality of your major outputs at a scale of 1 (lowest quality) to 5 (highest quality)

Ratings: 4, 5, 5, 4, 5, 4, 5, 5, 5, 4

04-FYR Macedonia:

- Symposium on Fire Management in Cultural and Natural Landscapes, Nature Conservation and Forestry in Temperate-Boreal Eurasia (GFMC, Freiburg, Germany, 25-28 January 2008)
- Meeting on Fire Management on Terrain Contaminated by Radioactivity, Unexploded Ordnance (UXO) and Land Mines” (Kyiv / Chernobyl, Ukraine, 6-8 October 2009)
- Advanced Wildland Fire Management Seminar (Antalya, 1-4 March 2010)
- Finalization of the Russian language version of the International Multi-Lingual Fire Management Terminology
- International meeting on Cross-boundary Fire Management (Irkutsk, Russia, 16-18 June 2010)

- International conference on Forest Fire: Management and International Cooperation in Fire Emergencies of the Asia Pacific (Khabarovsk, Russia, 3-7 October 2010)

08-Spain: Since 2009 when I became the Head of the Spanish Forest Fire Service we have not received deliverables or main outputs of the ToS on Forest Fires. In June 2010, at the Joint Meetings held in Freiburg we were informed about the activities of the UNECE/FAO joint office.

09-Turkey: Training, fire management and capacity building programs, and meetings to help decision makers and formulate policies concerning Wildland fires. I believe the overall ranking should be 4.

11-Ukraine:

- Recommendations on fire management in forests contaminated by radionuclides (5)
- Plan for elaboration of national fire policy (4)
- Exchange on latest development in fire science and technologies in the region and world, implication of prescribe burning in cultural landscapes (meetings in Freiburg, GFMC (2007, 2010), Macedonia (2010), Sankt-Petersburg (2010), 5-th Int. Wildland Fire Conference, South Africa (2011) (5)
- Role of agricultural burning in climate change (5)
- Integrated fire management (5)
- Forest fire training (4)

12-Germany: See final conclusions

TL Summary

Average of the 10 Ratings: 4.6

TL Comment

The reply by Spain reveals that it may not be clear to some Team Members that deliverables / outputs are published on the website of the Team³ and the 6 regional wildland fire networks embedded in the UNECE region. See final comments.

20. Do you receive feedbacks/comments concerning the disseminated outputs, whether printed or online, of your team? If so, how do you discuss and take them into consideration for the subsequent team outputs?

01-Belarus: Yes, I receive feedback/comments concerning the disseminated outputs of our team. These are taken into consideration for the subsequent team outputs.

03-Croatia: Yes

04-FYR Macedonia: Yes, I do. We discuss them via e-mails.

06-Russia: We receive feedbacks and comments and discuss them during next conferences and meetings and making final decisions.

07-Serbia: Yes, by e-mails.

08-Spain: Since 2009 we have not received any documents to discuss.

09-Turkey: Yes, we either have a discussion in side meetings at major wildland fire conferences or during our training programs or seminars, or through internet.

11-Ukraine: Yes. We discussed the outputs on regular meeting with national team members and authorities

12-Germany: Yes

TL Summary

Out of 9 replies 8 confirm receiving feedbacks and comments, and discussions are held.

TL Comment

The reply by Spain reveals that it may not be clear to some ToS Members that the deliverables / outputs of targeted activities are published on the website of the Team⁴ and the 6 regional wildland

³ <http://www.fire.uni-freiburg.de/intro/team.html>

fire networks embedded in the UNECE region. A more regular distribution by e-mail, however, makes sense. See final comments.

Structure of the Team

21. In your opinion, how representative is the composition of the team TC/EFC region-wise (e.g., in terms of how many of the countries in the region are represented; or what portion (forestland-wise or area-wise) of the region is represented by members of the team)?

01-Belarus: In my opinion the team composition is quite representative.

03-Croatia: It's represented well.

06-Russia: Good enough representative is provided.

08-Spain: With the recent update of the ToS list I consider the composition is representative, but I will add a Greek specialist, as a country with major forest fires.

09-Turkey: Because networks our team have strategically been established, every network has unique geographic, climatic and partly demographic features. So, the representation of the regions are quite satisfactory.

11-Ukraine: Member of ToS represents most critical from fire threats point of view in the world. Especially effective work is done in Eastern South Europe –Caucasus – Asia region. Ukraine in a framework of ToS establish strong collaboration both with EU, Eastern European and Central Asia countries.

TL Summary / Comment

All replies state that the composition of the Team is representative. In case of Greece the Team has a key specialist involved (indirectly) through an expert affiliated to the Wildland Fire Advisory Group (via Silva Mediterranea). Greece did not nominate a Team Member, but this is clearly compensated through the high-quality inputs by this affiliated representative.

22. Do you consider the current level of representation fair and satisfactory? If not, what sort of action do you think should be taken?

01-Belarus: Yes, the current level of representation is fair and satisfactory.

03-Croatia: It's fair

04-FYR Macedonia: It is satisfactory.

05-Lithuania: Yes

06-Russia: Fair and satisfactory

07-Serbia: Satisfactory

08-Spain: Yes, I consider it fair.

09-Turkey: Yes, but (effective) representation of some countries should be ensured.

11-Ukraine: Yes

TL Summary

All replies consider the current representation fair and satisfactory.

TL Comment

The comment by Turkey is challenging. UNECE has 56 member countries of which only 6 countries have limited to none wildland fire problems (Andorra, Iceland, Liechtenstein, Luxembourg, Malta, Monaco). **Thus, out of 50 UNECE member states in which wildland fires are an important issue only 21 (42%) are represented in the Team.** However, many countries not enrolled in the Team are participating in outreach activities of the Team and in the Regional Wildland Fire Networks. For instance, the South Caucasus region is represented in the ToS only by Azerbaijan. However, besides

⁴ <http://www.fire.uni-freiburg.de/intro/team.html>

Azerbaijan **Armenia and Georgia** are **actively participating in and benefiting from regional cooperation**. Close work is also ongoing with other countries not represented in the ToS, e.g. **Albania, Austria, Bosnia and Herzegovina, Finland, Greece, Hungary, Israel, Kazakhstan, Netherlands, Norway, Sweden, and Switzerland**.

23. Would you say there is regional bias within the team? (e.g. too much emphasis on an individual country or a subregion, which overshadows subregions that need the attention of the Team?)

01-Belarus: It is essential that more detailed information should be provided about forest stands occurring in radiation-contaminated areas in Belarus, the Russian Federation and the Ukraine.

03-Croatia: No

04-FYR Macedonia: No, there is no regional bias within the team.

07-Serbia: No regional bias.

08-Spain: I would say yes, in some way. The emphasis at international level is given to those countries that are more affected by forest fires, like the Mediterranean basin, which is logical. But for the past few years we have noticed an extraordinary emphasis in topics as fires in contaminated lands (radioactivity and unexploded devices) which affect just specific countries or fire emissions which is more related to civil protection than to forest fire management.

09-Turkey: Not necessarily.

11-Ukraine: Regional bias is quite adequate by levels of fire problems

TL Comment

As stated on the Team's website, main emphasis of the work of the Team is in assisting countries of the Eastern Europe, Caucasus and Central Asia (EECCA) region in building national capacity in fire management, development of national policies and addressing the specific problems in the region, including transboundary cooperation in fire management.⁵ With this regional focus it is intended not to overlap with the ongoing work of the European Commission through its European Forest Fire Information System (EFFIS) in the Western part of the UNECE region, notably in the (Euro-) Mediterranean region (in conjunction with the Silva Mediterranea Fire Group) and the North American Forestry Commissions' Fire Management Working Group. However, the overall intent of the ToS is to bring all these regional (or "sub-regional") networks together under the umbrella of the planned "UNECE Regional Forum on Cross-boundary Fire Management" in 2013.

24. Do you think that the composition of the team is critical with respect to the affiliation (government, universities or NGO's) of the member specialists?

01-Belarus: Yes, the composition of the team is critical with respect to the affiliation of the member specialists.

03-Croatia: No

04-FYR Macedonia: No, I don't.

07-Serbia: No

08-Spain: Yes

09-Turkey: Yes. In my opinion, member specialists should come from different affiliations.

11-Ukraine: Yes. It is very important to have active collaboration between government and Universities and NGO in a framework of ToS

TL Comment

This question sounds equivocal and can be answered by yes and no having the same meaning

⁵ See ToS Report 2009-2010: <http://www.fire.uni-freiburg.de/intro/ToS-Forest-Fire-Report-2009-2010.pdf>

25. How “balanced” is your team in respect of the members’ affiliations (government experts, university experts and NGOs’ experts)?

01-Belarus: Our team is well balanced in respect of the members’ affiliations.

03-Croatia: It’s balanced well.

04-FYR Macedonia: I think that my team is well “balanced”.

07-Serbia: Is well balanced.

08-Spain: I think there is a good balance between government and researchers, but there is no enough representation of NGO.

09-Turkey: NGO part is lacking.

11-Ukraine: Well balanced

TL Comment

The Team members include 3 non-governmental organizations (GOFC-GOLD, EC Joint Research Center and additionally representatives of the Regional Wildland Fire Networks, which often have a dual function [government-mandated Team member and function as lead or co-lead in regional networks]). Within the outreach work in member states NGOs are always participating in national consultations, e.g. representatives of WWF, Greenpeace and IUCN. This is considered more efficient as compared to include additional NGO representatives at UNECE regional level (usually regional representatives of above-mentioned NGOs are covering smaller regions such as the WWF Mediterranean office, etc.).

26. Do you consider the level of “expertise” in your team as a whole sufficient for your work? (please rank in a scale of scale of 1 – not sufficient - to 5 – optimum level)

Ratings: 5, 4, 5, 5, 5, 5, 4. **TL Summary:** Average rating: **4.7**.

Support from the Secretariat

27. How do you assess of the support by the UNECE/FAO secretariat to your ToS?

Provide list, ranking each item 1 (lowest quality) to 5 (highest quality):

- **Overall guidance:** 5, 3, 5, 5, 4, 4, 4 Av 4.3
- **Providing timely information and documents:** 4, 4, 5, 5, 5, 3, 4, 5 Av 4.4
- **Technical inputs/advice:** 4, 4, 4, 5, 5, 3, 4, 4 Av 4.1
- **Preparation of minutes:** 4, 3, 5, 5, 5, -, 5, 5 Av 4.6
- **Organisation of events:** 5, 4, 5, 5, 5, 3, 4, 5 Av 4.5
- **Guidance on reporting:** 5, 3, 5, 5, 5, -, 5, 5 Av 4.4
- **Distribution of ToS results:** 5, 3, 5, 5, 5, -, 4, 4 Av 4.4
- **Other (pls. specify):**
- **Total average rating:** **Av 4.4**

TL Summary

Average rating is high: **4.4**

28. Do you see shortfalls, for example in terms of resources or mandate, and how do you think these can be overcome?

01-Belarus: I see no shortfalls.

04-FYR Macedonia: No, I don’t see some shortfalls.

07-Serbia: No shortfalls

08-Spain: I think there are resources shortfalls. The lack of personnel at the secretariat as well as at the team leader is not helping to dynamize the ToS. On the other hand the overlap between all the working groups on forest fires at European level (European Commission Expert Groups on Forest

Fires and Civil Protection; Silva Mediterranea Working Group on Forest Fires; Wildland Fire Networks of the UNISDR...) does not help to clarify the scenario and to focus all the efforts.

09-Turkey: Partly, resources are not sufficient.

11-Ukraine: No

12-Germany: Insufficient financial resources of Team Members

TL Comment

The lack of resources is evident, despite the majority of comments do not see shortfalls. This impression can be explained by the financial resources provided by GFMC (and project funding) for co-financing the majority of the activities of the Team. Fact is that neither UNECE/FAO nor governments (with the exemption of Germany) or international organizations are providing funding for the work of the Team. The contribution by Germany is explained in the final comments.

29. In the case of lack of resources, do you have any suggestions on how to supplement them through alternative means?

01-Belarus: I have no suggestions.

03-Croatia: No

08-Spain: No, I do not have any suggestions.

09-Turkey: Governments can be encouraged to support the activities of the ToS.

11-Ukraine: Could be used better.

TL Comment

See final summarizing comments.

Impact of ToS/Communication

30. How well are the outputs of the ToS being used in your opinion?

01-Belarus: The outputs of the ToS offer a means of improving forest fire protection in the Republic of Belarus

04-FYR Macedonia: Not well enough.

06-Russia: Very well.

07-Serbia: Not well enough.

08-Spain: In my opinion not very well, since we have not received any in the past few years,

09-Turkey: Sufficiently.

11-Ukraine: Could be used better.

TL Comment

In the UNECE/FAO Team of Specialists on Forest Fire Report 2012, which is covering the Team's activities between January 2011 to end of January 2012, the TL and deputies reported about the outputs during the period by mandate item as follows:⁶

(1) To promote a continuous exchange of (new) knowledge and practices on fire management through the organization of meetings on emerging issues in Fire Management in the UNECE region: Complied – see list of activities in the report

and the publication of the International Forest Fire News: Complied – IFFN issues 2009 and 2010 are now published online; for financial problems of producing IFFN: see remarks at the end.

(2) To provide, in close cooperation and coordination with the UNISDR Wildland Fire Advisory Group / Global Wildland Fire Network, FAO, UNISDR, Council of Europe and other partners, guidance to ECE member states on forest fire management and forest fire policies, including bilateral / international cooperation of ECE member states: Complied – see list of activities in the report;

⁶ <http://www.fire.uni-freiburg.de/intro/ToS-Forest-Fire-Reporting-2011-January-2012.pdf>

(3) To organize regional seminars and training workshops in fire management: Complied – see list of activities in the report.

31. How do you assess the communication of the work of the ToS internally with other ToS, within the forest sector and outside the forest sector? How can it be improved?

01-Belarus: The communication of the work of the ToS with other ToS should be improved.

04-FYR Macedonia: The communication among different ToS's is insufficient. The reports and outputs from different ToS's should be distributed to the other ToS's.

07-Serbia: Communication is insufficient and reports and outputs from different ToS's should be distributed.

08-Spain: I cannot make an assessment on this since we are not informed about this type of internal communication.

09-Turkey: There are some problems. It can be improved through collaborative and coordinated work and through acknowledging the value of the work and contribution of the Team.

11-Ukraine: Workshops, personal communication

TL Comment

The evaluation of question / item 5 reveals lowest rating / interest concerning the need of cross-sectoral work between the different ToS. Given the regional priorities of the of the work of the ToS in the EEC[C]A region, however, the intent to closely cooperate with the ToS on Forest Policy in Eastern Europe and Central Asia (EECA) has been expressed clearly by the TL at the 33rd Session of the Joint FAO/UNECE Working Party on Forest Economics and Statistics in 2011.⁷

32. How do you assess the impact of the work/results of the ToS inside/outside the forest sector, and how can it be improved? Please provide examples if available.

01-Belarus: The results of the work of the ToS are positive; these are used to improve the ecological situation in the country.

04-FYR Macedonia: In terms of my ToS I think there is a visible impact.

08-Spain: I cannot make an assessment on this because we have not work on any result for the past few years.

09-Turkey: Fire management and training programs, for example, have been quite fruitful both contributing to building capacities in respective countries and contributing to international peace and cooperation.

11-Ukraine: Very much positive, but still could be improved

TL Comment

Although no comment was provided on impacts outside the forest sector: As stated in the objectives of work, the Team “*will continue to address all vegetation fires (“wildland fires”), including fires in the agricultural sector and in peatland / wetland biomes.*” In all countries of the UNECE region land use, land-use change, fire use and wildfires in the open landscapes (agricultural lands, pasture lands and other non-forest ecosystems) are strongly impacting forests and forest fires. Thus, assistance provided by the Team to countries for the development of national fire management policies and /or strategies includes the “outside sectors”. Fire problems arising at the interface between natural vegetated lands on the one side, and residential, industrial and otherwise anthropogenically impacted or modified vegetation on the other side (often referred to as “wildland-urban interface” – a term which insufficient to more complex and diverse than just considering the “urban” space being affected) are in the focus of the work of the Team – see activities listed in the review 2009-10 and 2011-12 of the Team.

⁷ <http://www.fire.uni-freiburg.de/intro/ECE-TIM-EFC-33-Session-Report-2011.pdf>

33. At the last session of UNECE/FAO TC/EFC in Antalya in October 2011, it was decided that the reports of the ToS will be shared and discussed in the annual meetings of the Working Party on Forest Statistics, Economics and Management (which is scheduled for March 2012). The objective is to identify possible synergies, and facilitate the exchange of experiences between ToS and delegations from member States. What has to be done to make this exercise useful and successful, by UNECE/ FAO Secretariat and by the ToS?

01-Belarus: There is a need to call a meeting of all the ToS to work out a strategy of their co-operation in the future.

08-Spain: This is a very interesting initiative that needs an integral and synoptic approach. The discussion of the ToS reports should be focused on the main issues identified as demanding further work and support.

09-Turkey: It is promising initiative. I hope it proves successful.

TL Comment

See remarks to items 5 and 31. The intent to closely cooperate with the ToS on Forest Policy in Eastern Europe and Central Asia (EECA) has been expressed clearly.

Conclusions

34. Please add any other comments or information you wish to provide.

08-Spain: The answers to this questionnaire have been made on the basis of my experience as a member of the ToS since 2009. I have not considered all the previous contributions from the Spanish Forest Fire Service to the ToS as well as the outputs and work of the ToS on Forest Fires.

Final comments by the Team Leader:

(A) Summary, narrative of ToS history and visions, and the way ahead

The reply rate of **57%** to this questionnaire refers to the total number of 21 member countries approached (not to the total amount of nominated focal points – there are up to three per country). ToS Members of 11 of 21 member states returned a completely or partially filled questionnaire. The Team Leader (TL, Germany) refrained from responding in the first round of evaluation of the survey in order not to bias the evaluation. However, in some cases the opinion of the TL was included. With this return rate the opinions expressed may be considered fairly representative. One of the ToS Members had never attended an activity of the Team. One Member expressed that he had not attended a ToS meeting. However, he is one of the 11 of 12 Members who had responded to the survey and participated in outreach or related activities of the Team.

The *modus operandi* of the Team must be clarified at this stage. The inauguration meeting of the renewed Team in April 2009 was attended by only 6 members due to the general lack of finances for travel. Since then no full-scale meeting was called because of general lack of funding for travel to general Team meetings. The returned questionnaires confirm that the lack of funding for the work of the ToS is a major impediment (cf. Item 29 of the questionnaire).

This is why ToS members used the opportunity to meet in side events during international or regional meetings or conferences. Most important, however, was the concrete outreach work by ToS Members in UNECE member states.

Meeting reports and relevant materials are published on the website of the Team:

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

(B) Narrative and Clarification of the *modus operandi* of the Team

Given the fact that the UNECE region is covering 56 industrial countries of the Northern Hemisphere it became clear in the 1990s that working through subregions would allow more targeted and efficient outreach work of the Team. By the late 1990s two such regional groups were in place in the UNECE region:

- **North American Forest Commission, Fire Management Working Group** (<http://www.fs.fed.us/global/nafc/fire/aboutus.htm>) ([Regional North America Wildland Fire Network](#)) (operational since 1962)
- **Silva Mediterranea Working Group on Forest Fires** (<http://www.fao.org/forestry/35587/en/>) ([Regional Mediterranean Wildland Fire Network](#)) (initiated as a Forest Fire Research Group in the 1970s)

This prompted ToS members, facilitated by the GFMC, to create new regional networks covering the territory of the UNECE region. In the concert of the formation of the Global Wildland Fire Network five regional networks were established between 2002 and 2008:

- **Regional Eurasian Wildland Fire Network** (<http://www.fire.uni-freiburg.de/GlobalNetworks/BalticRegion/BalticRegion.html>): This network (formerly called “Baltic Network”) is covering the “core region of activities” of the Team in the 1990s at a time when attention to the increasing wildland fire problems in Europe focussed on the Euro-Mediterranean region and neglecting the remainder of the European part of the region completely.
- **Regional Southeast Europe / Caucasus Wildland Fire Network** (<http://www.fire.uni-freiburg.de/GlobalNetworks/SEEurope/SEEurope.html>): The network (first called “Balkan Network”, later expanding to “South East Europe” and currently called “South East Europe / Caucasus”) is covering a region which is located between the Eastern Mediterranean and Eastern temperate-boreal Europe in which the political and socio-economic transition since the 1990s challenged governments and civil society to address the increasing but largely neglected wildland fire problems.
- **Regional Central Asia Wildland Fire Network** (<http://www.fire.uni-freiburg.de/GlobalNetworks/CentralAsia/CentralAsia.html>): The isolated situation of Central Asian countries (both UNECE member states and adjoining countries such as Mongolia and China) and the strong signals of climate change and consequences on the forest sector, including forest fires and fires affecting open lands such as steppe ecosystems, were reason for establishing networking arrangements in this region – see remarks below.
- **Regional Northeast Asia Wildland Fire Network** (<http://www.fire.uni-freiburg.de/GlobalNetworks/Northeast-Asia/Northeastasia.html>): Besides South Korea (the Korean Forest Service is in charge of leading the network), China, Japan and Mongolia, the only UNECE member in this network is Russia, with the largest forest territories and fire problems in Eastern Siberia and the Far East.
- **Sub-regional Euro-Alpine Wildland Fire Network** (<http://www.fire.uni-freiburg.de/GlobalNetworks/EuroAlpine/EuroAlpine.html>): A small “sub-regional” network focussing on the fire problems of the high-altitude ecosystems of the European Alps.

(C) The way ahead

The focus on the most pressing issues in each of the regions enabled the Team to do targeted outreach work. As stated on the Team’s website and the ToS report covering the period 2009-2010, main emphasis of the work of the Team is in assisting countries of the Eastern Europe, Caucasus and Central Asia (EECCA) region in building national capacity in fire management, development of

national policies and addressing the specific problems in the region, including transboundary cooperation in fire management.⁸

With this geographic regional focus it was and still is intended **not to overlap** with the ongoing work of the European Commission through its European Forest Fire Information System (EFFIS) in the Western part of the UNECE region, notably in the (Euro-) Mediterranean region (in conjunction with the Silva Mediterranea Fire Group). However, the overall intent of the ToS is to bring all these regional (or “sub-regional”) networks, including the North American Forestry Commissions’ Fire Management Working Group, together under the umbrella of the planned “**UNECE Regional Forum on Cross-boundary Fire Management**” in 2013.⁹

In this regard the ToS in Forest Fire, working through the Regional Wildland Fire Networks and the overarching Global Wildland Fire Network, is in the position to

- identify the activity profiles of other international groups and formal or informal networks working in wildland fire
- identify the possible overlaps and gaps of action needed, and
- finally the harmonization or coordination of activities in order to avoid parallel working, unnecessary duplication of efforts and thus economize invested efforts in international cooperation in fire management.

The role of the Global Fire Monitoring Center (GFMC), which was established in 1998 as an outcome of the work of the ToS, is recognized as a UNECE regional and global clearing house and a global fire information portal. Policy of the GFMC is not to duplicate or interfere with the mandated or voluntary work of other international groups, however, encouraging sharing of resources and developing coordinated activities with other groups on a voluntary basis. The close cooperation with sectoral agencies and programmes of the UN has been proven to be efficient – especially under the frame of the UN International Strategy for Disaster Reduction (UNISDR) under which the Global Wildland Fire Network / GFMC are recognized as a Thematic Platform.¹⁰ The UNISDR umbrella provides a forum in which all UN agencies and programmes and countries are collaborating in supporting the Hyogo Framework for Action.¹¹

It is obvious that since the intensification of the work of the ToS in the 1990s was possible only because of the provision of infrastructure, personnel and project funding by the Max Planck Society for the Advancement of Science under which GFMC is operating (including financing through third-party funds), which went almost 100% into the UNECE and global outreach activities. Meanwhile increasing attention to fire management and international cooperation in fire management is given by other international organizations such as FAO or the European Commission. While countries and institutions are benefiting from the increasing international interest, there is also some confusion

⁸ See ToS Report 2009-2001: <http://www.fire.uni-freiburg.de/intro/ToS-Forest-Fire-Report-2009-2010.pdf>

⁹ <http://www.fire.uni-freiburg.de/intro/UNECE-Fire-Forum-2011-Draft-Agenda.pdf>

¹⁰ Until 2001 the theme of wildland fire was addressed in **one of four Working Groups** under the Inter-Agency Task Force for Disaster Reduction (IATF) – the **Working Group on Wildland Fire** (<http://www.unisdr.org/2005/task-force/tf-working-groups4-eng.htm>). GFMC had inherited the seat of the IUCN in the IATF and was successful in transiting the Working Group on Wildland Fire to the Global Wildland Fire Network, which is now serving as a thematic platform of the UNISDR. Thematic platforms are independent groups in the disaster risk reduction community focused on supporting the implementation of the Hyogo Framework for Action. They aim to integrate specific global technical expertise with the concerns of policy makers and practitioners in the thematic areas of disaster risk reduction. See: <http://www.unisdr.org/partners/thematic-platforms>.

¹¹ The Hyogo Framework for Action (HFA) is the first plan to explain, describe and detail the work that is required from all different sectors and actors to reduce disaster losses by building the resilience of nations and communities to disasters: <http://www.unisdr.org/we/coordinate/hfa>

about parallel and non-coordinated work – and this is where GFMC is instrumental to facilitate a coordinated dialogue (cf. Item 28 of the questionnaire).

In summary the work of the Team of Specialists has been and shall continue focusing on the themes that are not or not sufficiently addressed by other groups / organizations:

1) Transatlantic dialogue

The UNECE Region is uniquely large. It includes Europe / Eurasian countries and also the USA and Canada. So, in this Team we can foster the transatlantic dialogue, which may serve to learn from each other on both sides of the Atlantic. Europe has learned a lot from advanced wildland fire science in the USA and Canada. Vice versa, our North American colleagues have very much benefited from exchanging experience with the multi-faceted wildland fire problems in the old cultural landscapes of Europe.

2) East-West wildland fire science and management dialogue

Beginning in 1993-1996 (with the Conference "Fire in Ecosystems of Boreal Eurasia" in Krasnoyarsk, Russian Federation [1993], and the Joint FAO/ECE/ILO Seminar on "Forest, Fire, and Global Change", Shushenskoe, Russian Federation [1996]) the Team, driven by its Secretariat GFMC, has built a bridge between the Eastern and Western fire science community, followed by a number of dedicated conferences and meetings, e.g. three major thematic conferences held with international partners in Russia in 2010 (note: the URL links in the following can be accessed when reading this report online):

- **Regional Conference on Cross-Border Fires (2010)**: The “International Conference on Cross-Border Forest Fires and Cooperation in their Suppression” was hosted by the government of Russia, supported by GFMC, UNISDR and the UNECE/FAO Team of Specialists on Forest Fire, with participation of government agencies of China, Belarus, Ukraine, Kazakhstan, Mongolia, South Korea, and the USA. [The conference was held in Irkutsk, Russian Federation, 16-18 June 2010.](#)
- **International Conference “Forest Fires: Management and International Cooperation for Preventing Forest Fires in the APEC Region” (2010)**: The Conference was convened in Khabarovsk, Russia, 4-6 October 2010. The conference aimed to strengthen cooperation between the emergency services of the APEC member economies in order to express readiness of the region to reduce the risks of wildfire disasters. 53 representatives from 8 APEC member economies and key experts from the world, including the Global Fire Monitoring Center (GFMC) and representatives of the Global Wildland Fire Network, took part in this event and recommended to go along with the initiatives of the UNECE/FAO ToS Forest Fires. APEC Forest Fire Regional Conference 2010 Resolution: [English version](#) / [Russian version](#)
- **International Meeting on Open Burning and the Arctic: Causes, Impacts, and Mitigation Approaches**: Between 8-9 November 2010 over seventy policymakers, scientists, activists, and academics from Russia, Europe and North America met in St Petersburg, Russia, for a two-day conference to discuss the causes and impacts of set fires in forests, peatlands, croplands, and steppe in Northern Eurasia and North America. [Recommendations of Open Burning and the Arctic](#) (PDF, 0.2 MB).

3) Support of Eastern Europe / Caucasus / Central Asian (EECCA) countries in transition

Emphasis on science and technology transfer towards supporting development of advanced fire management and related policies was in the EECCA region – as detailed above and earlier ToS reports. Numerous national round tables, training courses and workshops have contributed to real advancements. Funding for outreach activities were provided by the Council of Europe (EUR-OPA

Major Hazards Agreement), the Organization for Security and Cooperation in Europe (OSCE) and the Environment and Security Initiative (ENVSEC).¹²

4) Special emphasis on fire problems in cultural landscapes

We have addressed themes that are of major concerns all over Eurasia, notably the introduction of the use of prescribed fire in nature conservation, landscape management and forestry through the “[Eurasian Fire in Nature Conservation Network](#)”. The main event with a follow-up production of a White Paper was:

- Symposium on Fire Management in Cultural and Natural Landscapes, Nature Conservation and Forestry in Temperate-Boreal Eurasia, co-sponsored by the ToS Forest Fire (GFMC, Freiburg, Germany, 25-28 January 2008)
 - <http://www.fire.uni-freiburg.de/programmes/natcon/EFNCN-meetings-1-2008.html>
 - [Freiburg White Paper on the Use of Prescribed Fire in Land Management, Nature Conservation and Forestry in Temperate-Boreal Eurasia \(finalized in February 2010\)](#) (PDF, 2.8 MB)

A major activity of the Team concentrated on fire management on contaminated terrain:

- **Advanced Seminar “Wildfires and Human Security: Fire Management on Terrain Contaminated by Radioactivity, Unexploded Ordnance (UXO) and Land Mines”**

This seminar addressed consequences of wildfires and fire management on contaminated terrain and will be conducted in Kiev and Chornobyl, Ukraine, 6-8 October 2009, by the Global Fire Monitoring Center (GFMC) in the frame of the activities of the Council of Europe (CoE) and the joint project “Enhancing National Capacity on Fire Management and Risk Reduction in the South Caucasus” (Environment and Security Initiative [ENVSEC]), the UNISDR Regional Southeast Europe / Caucasus and Central Asia Wildland Fire Networks and the UNECE / FAO Team of Specialists on Forest Fire.

 - [Background information](#) (English) (PDF)
 - [Background information](#) (Russian) (PDF)
 - [Seminar brochure](#) (PDF, 3.3 MB)
 - [Letter of Endorsement by the Speaker of the Ukrainian Parliament Mr. Litvin](#)
 - [Seminar report](#) (PDF, 0.1 MB)
 - [Chernobyl Resolution on Wildfires and Human Security: Challenges and Priorities for Action to address Problems of Wildfires burning on Terrain Contaminated by Radioactivity, Unexploded Ordnance \(UXO\) and Land Mines](#) (PDF, 52 KB)

5) Solidarity during emergency situations and related crises

Many of our ToS participated in mission during and after extreme fires and assisted our member governments in analysis and concrete measures to encounter deficits, e.g. in

- Serbia (2007)
- [FYR Macedonia](#) (2007)
- Croatia (2007)
- [Russia](#) (2010)

¹² The Environment and Security (ENVSEC) Initiative is a partnership of six organizations -the Organization for Security and Co-operation in Europe (OSCE), Regional Environmental Centre for Central and Eastern Europe (REC), United Nations Development Programme (UNDP), United Nations Economic Commission for Europe (UNECE), United Nations Environment Programme (UNEP), and the North Atlantic Treaty Organization (NATO) as an associated partner- to address environment and security challenges in Eastern Europe, South Eastern Europe, Southern Caucasus and Central Asia.

6) Networking

The structure and achievements of the regional networks which evolved in the UNECE region have been highlighted above. The ToS on Forest Fire had taken the initiative and lead to form the Global Wildland Fire Network, which is the only network addressing fire management at global level.

7) Fire Management for Environment and Peace

The ToS has been involved in countries / regions in which political tensions and even armed conflicts are important impediments for developing peaceful neighborships. Following the mandate of United Nations University (to which GFMC is belonging as Associate Institute)¹³, we have contributed through our Team member involvement to overcome heritages of historic conflicts, or contributing to calm ongoing tensions by cooperation in environmental protection. Examples of recent interventions were in the South Caucasus between 2006 and 2012 – there are abundant reports available on the website of the Team and the Regional Eurasian Wildland Fire Network.

(D) Financial resources

As was mentioned under Item 8 75% of the replies reported lacking financial support. Personal communication with all Team Members over the years revealed a tentatively similar average. Main finances for the work of the ToS are provided by the Team Leader through the GFMC. Financed by Freiburg University until 1990, and since 1990 / ongoing by the Max Planck Society for the Advancement of Sciences. Total funding for the work of the ToS by Germany are in the magnitude of \$US 1 to 3 million among which in-kind inputs averaging in at least a half-time senior staff position since 1988 (investments for the ToS and the enlarged work of GFMC cannot be separated clearly). This funding until 1990 came mainly from Freiburg University, since 1990 from the Max Planck Society for the Advancement of Sciences. Major contributions for outreach work of the UNECE Team of Specialists on Forest Fire came, among other, from:

- Council of Europe (EUR-OPA Major Hazards Agreement)
- Organization for Security and Cooperation in Europe (OSCE)
- Environment and Security Initiative (ENVSEC)
- Federal Ministry of Food, Agriculture and Consumer Protection, Germany

Without these financial contribution the outreach work of the Team would never have been so successful. The Team Leader is indebted to these organizations and agencies for the support

(F) Conclusions

The evaluation of the survey has revealed a high awareness and interest of ToS Members actively involved in the outreach work of the Team. The lack of funding for the work of the Team either by supporting individual ToS Members / country focal points through their home agencies, or collectively via the Secretariat or the Team Leader, does not allow many focal points to actively participate in the work of the Team.

Although it seems that ToS Members of countries actively interested in building fire management capacity and enhancing the fire management policy dialogue, are involved, notably in the Eastern Europe / Caucasus / Central Asian (EECCA) region. However, UNECE member states should consider providing finances to support the work of the Team of Specialists on Forest Fire in the

¹³ <http://unu.edu/institutes-and-programmes/associated-institutions> and <http://www.fire.uni-freiburg.de/programmes/un/unu/unu.htm>

endeavor to address the pressing problems of fire in a region which is exposed to wildland fire threats arising from the conflict between the nature of fire, the heritages, progress and vulnerability of civilization, notably in the cultural landscapes of industrial countries, and the consequences and threats of regional and global climate change.