Forestry Department

Food and Agriculture Organization of the United Nations

Fire Management Working Papers

Fire management voluntary guidelines

Preparation for action - country and regional level methodology

by
A.P. Vuorinen & L.M. Rosengren

2008

Disclaimer

The Fire Management Working Papers report on issues addressed in the work programme of FAO. These working papers do not reflect any official position of FAO. Please refer to the FAO website (www.fao.org/forestry) for official information.

The purpose of these papers is to provide early information on on-going activities and programmes, and to stimulate discussion.

Comments and feedback are welcome.

For further information please contact:
Mr. Petteri Vuorinen, Forestry Officer (Fire Management)
Mr. Jim Carle, Officer in Charge
Forest Resources Development Service
Forest Management Division, Forestry Department
FAO
Viale delle Terme di Caracalla
I-00153 Rome, Italy
e-mail: petteri.vuorinen@fao.org
          jim.carle@fao.org

or: FAO Publications and Information Coordinator:
andrea.perlis@fao.org

For quotation:

FAO (2008). Fire Management Voluntary Guidelines – Preparation for action - country and regional level methodology. Fire Management Working Paper 19. www.fao.org/forestry/firemanagement/en/

FOREWORD

Fires impact upon livelihoods, ecosystems and landscapes. Despite incomplete and inconsistent data, it is estimated that 350 million hectares burn each year; however, the nature of fires determines whether their social, cultural, environmental and economic impacts are negative or positive. Up to 90 percent of wildland fires are caused by human activities primarily through uncontrolled use of fire for clearing forest and woodland for agriculture, maintaining grasslands for livestock management, extraction of non-wood forest products, industrial development, resettlement, hunting and arson - thus any proactive fire management needs to adopt integrated, inter-sectoral, multi-stakeholder and holistic approaches. The situation varies markedly in different regions of the world.

In accordance with recommendations of the International Wildland Fire Summit in October 2003, the Ministerial Meeting on Sustainable Forest Management in March 2005 and the FAO Committee on Forestry (COFO), also in March 2005, FAO coordinated a multi stakeholder process to prepare the Fire Management Voluntary Guidelines as part of a global strategy for international cooperation in fire management.

The voluntary guidelines sets out a framework of legally non-binding principles and internationally accepted strategic actions. They address the cultural, social, environmental and economic dimensions of fire management at all levels.

The Fire Management Voluntary Guidelines can be viewed on:
http://www.fao.org/docrep/009/j9255e/j9255e00.htm

The purpose of this Working Paper is to describe the methodology for capacity building to translate the Fire Management Voluntary Guidelines into policy, plans and practices. It shall be used in preparation for country and regional meetings to conduct a needs analysis to assist in prioritization of actions and elaboration of programmes or projects for future strengthening of capacity and capability to support better fire management.

Table of contents

1. Introduction

Background to Fire Management Voluntary Guidelines

In accordance with recommendations of the International Wildland Fire Summit in October 2003, the Ministerial Meeting on Sustainable Forest Management in March 2005 and the FAO Committee on Forestry (COFO), also in March 2005, FAO coordinated a multi stakeholder process to prepare the Fire Management Voluntary Guidelines as part of a global strategy for international cooperation in fire management.

The voluntary guidelinessets out a framework of legally non-binding principles and internationally accepted strategic actions. They address the cultural, social, environmental and economic dimensions of fire management at all levels.

The principles and strategic actions are global in scope and are provided to: all elements of civil society and the private sector; member nations of FAO and non-members; policy level and senior managers of sub-regional, regional and global organizations, whether governmental or non-governmental; owners and managers of forest, range, grassland and other ecosystems; and all stakeholders concerned with the protection of lives, property and resources from the effect of unwanted, damaging fires and with the use of fire to enhance ecosystems and economic benefits. Other sectors may also find the principles and strategic actions useful in their roles in society: insurance companies, advocacy groups, and specialists in communications, disaster management and public relations.

It is anticipated that the principles and strategic actions will be promoted for use in governance, education, guidance, benchmarking, cooperation and advocacy related to all aspects of fire management. Their various features will provide contexts for social, economic, cultural, environmental and political discussions at sub-national, national, regional and international levels. The principles and strategic actions can serve as a checklist to strengthen policies, legal and regulatory frameworks, plans and procedures and, where these do not exist, will be a useful basis for their development and implementation.

The voluntary guidelines are intended to serve the following objectives:
1. Establish principles in accordance with the relevant rules of international law for responsible fire-management activities, taking into account all relevant biological, technological, economic, social, cultural and environmental aspects;

2. Contribute to the establishment and implementation of national and sub-national policies and planning mechanisms for establishing or improving the legal, regulatory and institutional framework required for responsible fire-management activities;

3. Provide guidance that may be used, where appropriate, in the formulation and implementation of international instruments, both binding and voluntary;

4. Facilitate and promote mutual assistance and technical, financial or other forms of cooperation in fire management between agencies and donor organizations;

5. Encourage and publicize the contribution of effective community-based fire management in providing food security and meeting people's livelihood needs; and

6. Advocate sustainable land- and resource-management programmes that consider the ecologically appropriate use and management of fire, where permitted, and the suppression of unwanted, damaging fire.

Special consideration is given to social and community values and to engaging the community in fire-management planning and implementation.

2. Purpose of this Working Paper

The purpose of this Working Paper is to describe a methodology for capacity building to translate the Fire Management Voluntary Guidelines into action proposals.

In order to achieve an efficient and well targeted implementation of the Voluntary Guidelines it is crucial to undergo a thorough orientation. The orientation will provide capacity building and lead towards a common view of the present situation in fire management and a better understanding of the strengths, weaknesses, opportunities and threats.

The process described in this Working Paper involves multi-stakeholder participation. The equal participation of relevant stakeholders is crucial in order to balance the different interests and to achieve a common view of how to strengthen weaknesses, exploit opportunities and defend against threats. This Working Paper gives guidance how to involve stakeholder groups to achieve a common understanding on how to avoid conflicts. A thorough multi-stakeholder process will lead to a sense of ownership and responsibility for the process among participants, which in turn will strengthen the commitment to accomplishing the actions.

The primary users of the Working Paper are likely to be Government policy, legal, regulatory and planning decision-makers as well as investors (public or private, corporate or smallholder) and fire managers.

3. Preparing for action - Methodology

3.1. Scope of the methodology

This section explains the processes for translating the Fire Management Voluntary Guidelines into action proposals.

The process consists of two main phases – 1) a multi-stakeholder process at country level and 2) a multi-stakeholder workshop at a regional level gathering representatives from about two to six countries. It is essential that each phase applies multi-stakeholder participation.

3.2. Phase I – The country process

3.2.1. Introduction

The first phase of the process takes place on a country level. During phase one relevant stakeholder representatives are appointed and involved in the process translating the Fire Management Voluntary Guidelines into actions. Figure 1. illustrates the country process actions and outputs.
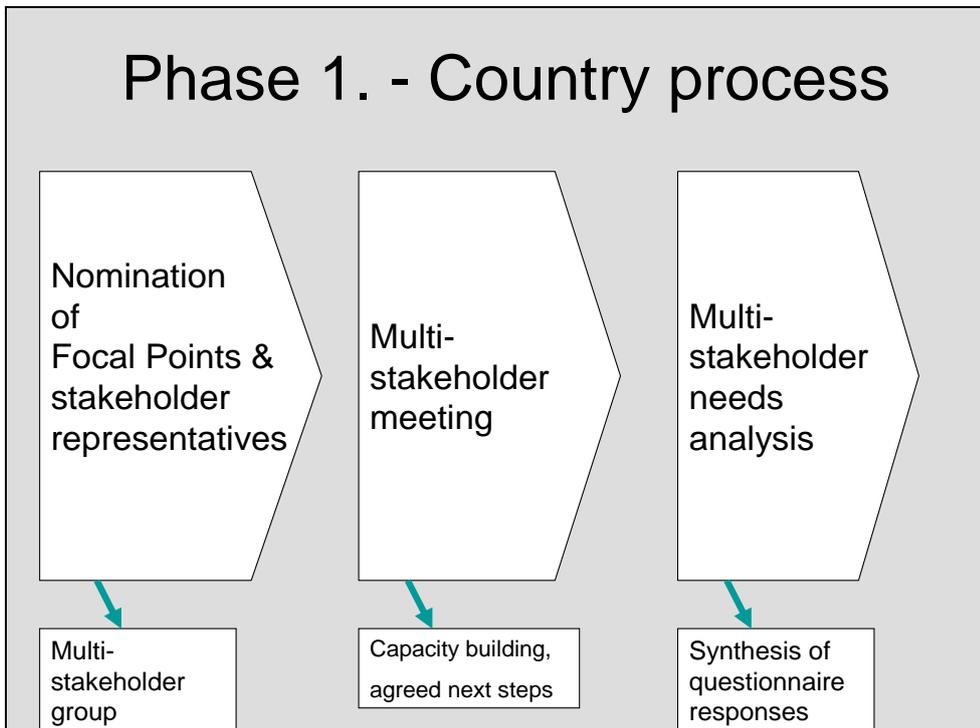

Figure 1. The diagram illustrates Phase one – the country process. The arrow boxes outline the actions and the boxes below each describe the outputs of the actions taken.

3.2.2. Step one - Government receives invitation to initiate the process from FAO

The Fire Authority will receive a letter from FAO with material and guidance for the processes as and questionnaires (see Annex 2 and 3) to assess performance and needs in support of the fire management sector. The questionnaires relate directly to the principles and strategic actions in the Voluntary Guidelines.

3.2.3. Step two - Nomination of focal points of key stakeholder groups

The Head of the Fire Authority is asked to nominate a Focal Point that will be in charge of the country process. This focal point will be in charge of contacting key stakeholder groups in fire management that could contribute to the process in a valuable way. At least the following stakeholder groups are advised to be enrolled in the process:

- Government (central and provincial)
- Private sector (corporate and smallholder)
- NGOs (environment and social/cultural)
- Scientific and/or academic
- Local communities / communities of interest

Additional stakeholder groups crucial to the implementation process are open to participate in the process. Each stakeholder group should nominate one or two representatives. It is of highest importance that the representatives are dedicated and ready to commit through both phases of the process, the country and regional levels.

The nominated representatives are to appoint a chair from the representatives chosen for the process. The chair will be the co-ordinator of the group.

3.2.4. Step three – Multi Stakeholder Meeting

After the relevant stakeholder groups have been informed of the process, have accepted the invitation and nominated representatives the Focal Point will arrange a meeting to bring together the representatives of the key stakeholder groups. A FAO officer will participate in this multi-stakeholder meeting and will give a presentation to introduce stakeholders to the Voluntary Guidelines and describe the objectives, outputs and expected outcomes of the process. The FAO officer will outline the steps to be taken prior to the regional workshop including completion of the questionnaires (Annex II and III) and preparation of a country synthesis. The participants in the multi-stakeholder meeting will agree upon key dates when:

- Participants will return the questionnaire to the Focal Point,
- The Focal Point will send out a draft synthesis to the participants,
- The participants will return their possible comments concerning the draft synthesis,
- The Focal Point will return the synthesis to the FAO headquarter

3.2.5   Step four - Multi-stakeholder needs analysis

The Focal Point will distribute the questionnaires received from the FAO headquarters earlier to the chosen representatives. See Annex 1. Every representative is to fill in the questionnaire. To get the most out of the process it is crucial that each focal point will respond to the whole questionnaire, taking the time to thoroughly consider the response to each question to reflect the perspective of their stakeholder group in an honest and frank manner.

Within the questionnaire there will be instances when the representatives will be answering questions on the needs of other stakeholder groups, and in other instances on their own group's needs. The person answering the questionnaire will be expected to later discuss and defend their responses to the questionnaire.

The purposes of filling in the form are a) to get acquainted with the Voluntary Guidelines, b) critically observe and reflect on their needs in fire management and c) identify priority needs to improved fire management d) to prepare for the regional workshop.

3.2.6.   Step five – The synthesis

A 3-4 page synthesis of the preliminary results of the questionnaire responses is to be prepared. The synthesis should highlight the areas where the stakeholder groups, in their assessment of needs have agreed or have substantially differed. The synthesis should additionally include a brief outline of the following information:

- Scale of fires in the country,
- The role of major stakeholder groups,
- Perceived strengths,
- Perceived weaknesses,
- Potential threats,
- Proposed actions (who, what, how),
- Current and potential sources of funds.

A list of the questions in the questionnaire that got an average of "needs attention" and "needs substantial attention" should be included in the synthesis as an annex.

The Focal Point is to prepare a draft synthesis to share with the questionnaire respondents for their comment. After incorporating the comments the Focal Point is to send the synthesis to the FAO headquarter by the due date.

3.3. Phase II – The regional process

3.3.1. Introduction

The second phase of the process consists of a four-day regional workshop. Up to six countries, which have completed all prerequisite information as detailed in Phase one will be invited by FAO to participate in a regional workshop to learn and share views concerning the Voluntary Guidelines and to prepare action plans. Each country will nominate 5-6 candidates who were involved in the phase one process, to attend the regional workshop.

The objectives of the workshop are to:

- Orient/sensitize stakeholders to the principles and applications of the Voluntary Guidelines as a planning, management and monitoring tool in policy, legal and technical work;
- Discuss the institutional, economic, social and cultural, environmental and enhanced fire management capacity and how to balance the different contexts;
- Analyse problems requiring attention;
- Identify priority areas that need to be addressed;
- Prepare action frameworks to detail impacts, outcomes, outputs, activities, stakeholders, indicators and assumptions;
- Review follow-up actions and funding to develop a programme or project to strengthen fire management development.

The anticipated outputs for each participating country include:

- A synthesis;
- An action framework.

The anticipated outcomes are to achieve:

- Greater stakeholder participation;
- More clear and consistent fire management policy, legal and regulatory frameworks;
- More balanced planning to take into account all dimensions of fire management;
- Improved field practices;
- Enhanced contribution of fire management on the wider concepts.

For the workshop objectives and benefit to countries and stakeholder groups to be achieved it is of utmost importance that the Focal Points participating in the regional workshop have participated in the process from the outset at a country level. They should be acquainted with the background material; the Voluntary Guidelines and the synthesis of the results of the questionnaire responses. The participants in the workshop must have participated in the country level multi-stakeholder meeting.

It is crucial that the country delegation has already held preliminary discussions on their view of the general situation of the fire management sector and pinpointed preliminary problem areas. Without proper preparation of each participant the workshop can not work effectively or achieve the objectives.

The regional workshop follows the process outlined in Figure 2. as described below.
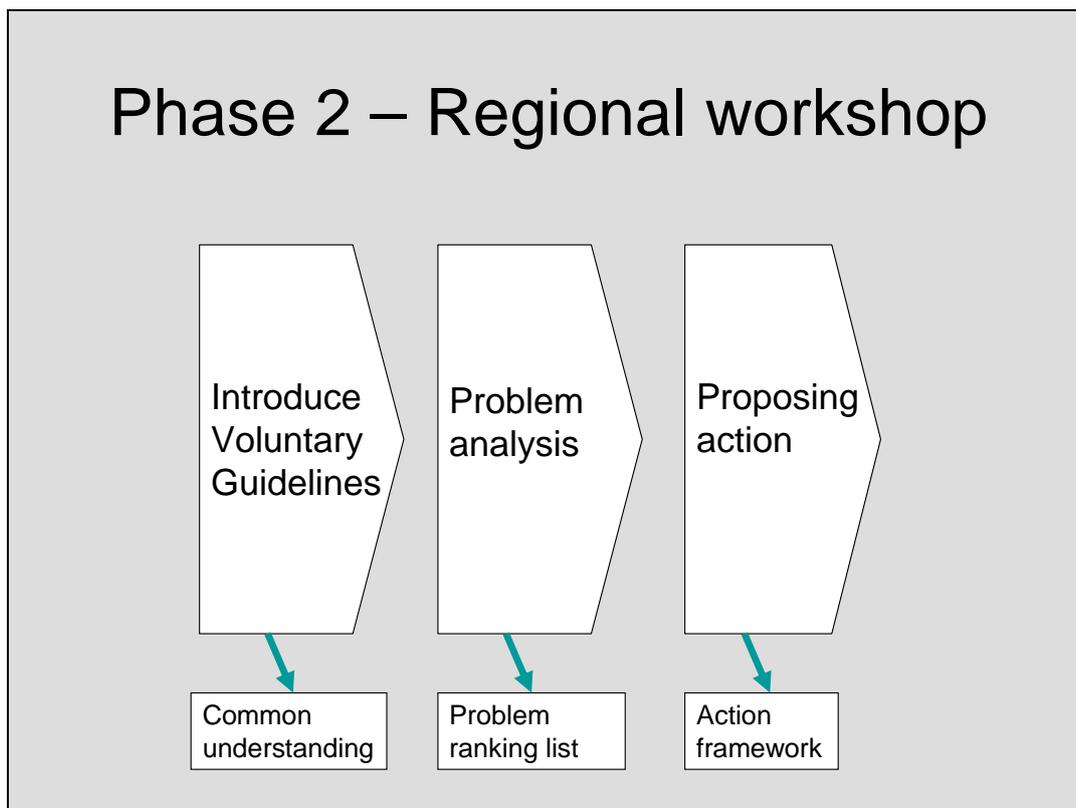
Figure 2. The diagram illustrates Phase two - the regional workshop. The arrow boxes outline the actions and the boxes below each action-box describe the outputs of the action taken.

3.3.2. Step one - Introduction of Fire Management Voluntary Guidelines

The four-day long workshop will begin with an orientation by the facilitators who will explain:

- Objectives of the workshop,
- Process of how the Voluntary Guidelines were derived,
- Purpose of the Voluntary Guidelines,
- Structure of the Voluntary Guidelines,
- Stakeholder benefits of implementing the Voluntary Guidelines,
- Importance in maintaining multi-stakeholder processes and dialogue,
- Terminology.

The aim of the introductory orientation is to reach a common understanding between the country delegations and stakeholder representatives.

The general concept of the Voluntary Guidelines will be presented to the workshop participants by external facilitators. The five main Principles (institutional, economic,

social/cultural, environmental and enhanced fire management capacity) will be introduced to the stakeholders as well as the concept of Strategic actions.

Each country delegation will give a presentation of their country synthesis that will be discussed with other participants.

3.3.3. Step two – Problem analysis

The next step of the workshop will concentrate on an analysis of the current state of fire management policy at national level using the 11 Principles of the Voluntary Guidelines as reference material.

The five main dimensions institutional, economical, social/cultural, environmental and enhanced fire management capacity approaches will be presented by the facilitator.

After the presentation, group work will take place. Within country delegations form the groups. The facilitators will lead the discussion and answer questions when needed. The group will use the questionnaire (see Annex 2) and the synthesis as a base for the discussions. The group is to list the issues that after discussion the group agrees upon that most importantly need to be addressed. The group is to focus attention on the topics that, in the multi-stakeholder performance-questionnaire, were identified as "needs attention" and "needs substantial attention" (Annex 1 of the country synthesis). However, also issues perceived as opportunities and strengths may be listed and ranked as important to address. The table that is to be found in Annex 4 called "Action Framework" is to be used as a framework for the group work.

After the group has agreed upon a list of issues that need to be addressed a preliminary ranking of importance of the issues should to be made.

The groups will then present their ranked list of issues that the country group agreed upon to the participants of the workshop. After the group presentations participants will provide feedback and exchange views.

The same analysis work will be then done using the 15 Strategic actions (see Annex 3) as reference material.

3.3.4. Step four – Proposing actions

After doing the problem analyses the delegates will reflect upon how to:

- Overcome weaknesses
- Exploit opportunities
- Defend against threats

The group will discuss which of the highest ranked topics listed in the problem analysis that the group finds most in need of action in an implementation programme of 3-5 years. The prioritising is to be agreed upon after discussions within the group between

the different stakeholder representatives (including results from the both analysis works: Principles and Strategic actions).

The ranked issues should strengthen capacity and capability to support the fire management policies, plans and practices. When doing the ranking it is important to take into consideration whether the issue is feasible to accomplish within the 3-5 year time frame. Things to consider when making the decision include, will sufficient funding be available for the implementation actions in question. The outcomes should strengthen existing national strategies, policies, regulations, plans and practices for fire management.

Each country group will build a 3-5 year action framework to define the anticipated actions, outputs, outcomes and impacts for each prioritised issue. Further information on how to build an action framework is provided in Annex 4.

The actions derived from the action framework may provide inputs for project concept notes, suggestions for strategies or suggestions for programmes of work depending on what the delegation consider most appropriate, effective and useful. It is important that these actions can realistically be achieved within the 3-5 year time frame.

After step three the participants will have a clear vision of the actions and outputs necessary to achieve their defined outcomes and impacts, including time-bound actions required by the specific stakeholder groups.

3.3.5. Step five - Defining follow up actions

Each country delegation will reflect upon the follow up actions (who, what, when, where, why, how). Who will be responsible for what? What will be the time frame for the different actions? Where will this be carried out? Why will it be done this way? Another critical question is: where will the funding come from? A brief synthesis of proposed following up actions will be prepared. An actions framework for detailing follow up actions is provided in Annex 4.

Each country delegation should have a clear vision of the actions and outputs necessary to achieve their defined outcomes and impacts.

4. References

FAO. 2006. *Responsible management of planted forests: voluntary guidelines.* Planted Forests and Trees Working Paper 37/E. Rome
(also available at www.fao.org/forestry/site/10368/en).

FAO. 2007. How to make the NFP process work through participation, draft guidelines. Unpublished

FAO, 2007. Standard Project Document Format: Guidelines for Project Formulators. Field Programme Circular, No. FPC 2007/02, FAO, Rome, 13 March, 2007.

Annex 1. Multi-stakeholder participation

The whole methodological process for capacity building to translate the Fire Management into policy, plans and practices involves multi-stakeholder participation. The equal participation of all relevant stakeholders is crucial in order to balance the different interests and to achieve a common view of how to strengthen weak areas.

What is multi-stakeholder participation?

"Participation" is a process during which individuals, groups and organizations are consulted about or have the opportunity to become actively involved in a project or programme of activity (OECD, 2001).

A "stakeholder" is any individual, social group or institution that has a stake (i.e., an interest or influence) in the forest sector. Stakeholders may be affected directly or indirectly by the fire management and the implementation of the voluntary guidelines, in positive or negative ways. Stakeholders include those who can and would like to influence the process.

The term "stakeholder participation" describes the process whereby stakeholders are actively involved (to varying degrees) in management decisions, activities and projects. There are many ways in which people can participate. It is therefore important to classify stakeholders according to their importance for and influence on the process.

What are the outcomes of participatory approach?

1. Clarifying which issues the voluntary guidelines should address: All participants in a process bring their own specific knowledge and expertise. Broad participation can therefore widen and deepen the understanding of who the key stakeholders are and which issues the voluntary guidelines will need to address in its formulation and implementation. Participation can also improve the accuracy and relevance of the action plans as well as better identification of benchmarks and directions for change, improving visioning of the fire management sector and the role of the voluntary guidelines and providing a sounder basis for monitoring. Participation can bring a wider non-forestry view of problems linked to fire management, which improves social and economic analysis by thinking "out of their box" to address root causes and put sustainable solutions in place.

2. Improving the coherence of policy: It is crucial to include the participation of people who, although not directly involved in fire management, come from sectors that influence it. This ensures that the implementation of the voluntary guidelines is coherent with other sectors and processes and coordinated with the wider factors that influence the fire sector. An action plan developed with links to the wider framework of existing government policies, plans and processes – including those addressing poverty, the divestment of government civil service departments, the decentralization of planning and budgeting, economic and industrial growth, rural development and agricultural transformation, and market processes and trends – will be easier to implement effectively.

The following are some of the important links that should be made:

3. Improving sector governance: The implementation of the voluntary guidelines will in many cases include developing new policy, legislation, regulations, standards or strategies – the framework for good governance. Good participation in the development of these has the twofold benefit of:

- **Improving public policy**: participation can reduce the need for testing or the likelihood of initial problems, because the people who will have to comply with a new framework have had a say in its development rather than merely having to accept other people's decisions. It might take longer to develop new frameworks this way, but it makes them more effective and acceptable when they are introduced, less likely to need changing later and more likely to work;

- **strengthening democracy**: participation can make it clear that government decisions reflect not just the views of government members, but also the wider needs of society, as expressed through a formal participation procedure. It makes it clear that it is not just a centrally driven process. This promotes democracy and develops trust between the public and government, which is a benefit at the political level for a government that is promoting its democratic record, and a useful justification for gaining support for the participatory process.

4. Raising the profile: The basic argument that the voluntary guidelines are an instrument for positive environmental, social and economic outcomes is a strong reason for implementing them. Participation from some key levels helps to ensure that this point is heard by the right people. The following are some of the key levels that should be involved:

- **power holders** Participation should include these players, either directly or indirectly; on order to ensure that resources are available to implement reforms (e.g., through obtaining approval for a key piece of legislation). It is crucial for the team in charge of the implementation to understand the interests and objectives of these power holders.

- **important stakeholder groups**: the rural population, private sector (private and corporate, small, medium scale and large), non-governmental organizations (NGOs), etc. provide essential support for development of fire management,

- **cross-sectoral linkages**: participation of broader government (sectors other than forestry) generates better awareness among non-forest sectors of the role and value of forestry and of how they themselves can influence these.

- **financial support**: it is important to have some participation from the "purse holders" in government, the private sector, NGOs and/or potential donors. Their participation helps them to see that the implementation process of the voluntary guidelines is well-managed, is justified and brings benefits to their own objectives.

5. Building ownership: The nature and level of ownership in the voluntary guidelines is a basic issue, which should be considered as the main indicator of success for an implementation process of the voluntary guidelines. Including participation demonstrates that the implementation is not simply a centrally driven process, and encourages people to become involved. Participation builds ownership of the changes to be implemented, making it more likely that people will respect the forest and implement the changes. With broader ownership, the basis of accountability also becomes wider, because more people have agreed which outputs to work towards.

6. Managing inevitable conflicts: When stakeholders are brought together, conflict of interests, objectives and opinions cannot be avoided. It must therefore be managed, and doing so is constructive, if challenging. Participation in voluntary guideline action formulation allows stakeholders to discuss and negotiate the issues of conflict, helps people to understand each other's points of view and makes it easier to reach a common solution. If conflicts are ignored during the formulation, they are more likely to cause problems during implementation, when the opportunities for solving them are more limited, and the whole implementation may be stalled.

7. Improving results: Engaging actors to participate in a policy process by discussing options, making decisions and planning actions has three key results: they have better understanding of the future shape of the fire management issues, and the benefits it will bring; they are more engaged in ensuring that their proposals are followed by actions; and they understand clearly what their own roles in the voluntary guidelines are. There are several important aspects of this:

- ensuring that the people involved have clear and realistic **expectations** of how things will progress, and a clear understanding of the **roles and responsibilities** of each stakeholder group in the actions proposed;
- allowing the development of a **realistic plan** of action for the voluntary guidelines, which everyone agrees can work and which promotes **coordination** of activities for effective implementation, assigning the most appropriate player(s) to each role;
- engendering **new partnerships**,
- increasing understanding of the **benefits** that will flow from implementation, to fire management and beyond, which encourages greater support (financial and human resources), making successful implementation more likely.

Participation benefits checklist

• Shared vision for the future of forest sector development, and a viable path of change.
• Coherent policy, strategic, legal and institutional frameworks that are acceptable to stakeholders.
• Improved governance through more effective new policy, legislation and strategic frameworks.
• Compliance with international agreements.
• Clear understanding of the fire management and it's contributions to wider national objectives (i.e., economic, social and environmental).
• Increased political support for fire management through effective advocacy.
• An attractive profile for forestry to promote investment.
• Owned and respected outcomes, which are more likely to be implemented.
• A realistic implementation plan for the forest sector, with clear and agreed roles and responsibilities for all actors.
• Better coordination of actions and inputs, which increases effectiveness and efficiency.
• Partnerships for effective implementation and sustainable management.
• Better accountability of forest sector institutions.
• Wider public support.

Annex 2. Multi – Stakeholder Needs Analysis: Principles

Social and cultural principles				
Principle 1. Sustainable livelihoods The appropriate use and management of fire will promote sustainable livelihoods.	Adequately addressed	Needs attention	Needs substantial attention	Not applicable
1. Are unplanned fires that threaten assets and sustainable livelihoods actively suppressed?				
2. Is the appropriate management and responsible use of fire for sustainable silviculture, agriculture, livestock and watershed management and biodiversity conservation allowed and promoted (while balancing these with the need to protect civilians, communities, organizations and governments from the unwanted and harmful effects of fire)?				
3. Are fuel-reduction programmes planned and undertaken as cost-effective methods for fire prevention and reduced fire risk?				
4. Is the use of planned fire across broad landscapes promoted to restore or maintain natural fire regimes, facilitate land management and reduce the risk of large-scale destructive wildfires?				
5. Are natural fires allowed to burn within an appropriate range of frequency, season and intensity in fire-dependent ecosystems for economic and social benefits, as well as for maintaining habitats and reducing the cost of suppressing unwanted fires?				
6. Is effective monitoring and evaluation of the impacts of planned and unplanned fires promoted?				
Additional comments:				

	Adequately addressed	Needs attention	Needs substantial attention	Not applicable
Principle 2. Human health and security Human health and security will be improved by minimizing the adverse effects of fire.				
1. Is safety provided for firefighters, fire managers and public in all fire activities?				
2. Is an effective fire prevention programme (minimizes the number and impacts of unwanted, destructive fires) maintained and supported?				
3. Is a fire danger rating system developed (or adapted to an existing one, in conjunction with reliable weather forecasting), to provide hazard and risk assessments to agencies, landowners and communities?				
4. Are early detection and warning systems utilized to reduce the health and security impacts of wildfire?				
5. Is education and training provided to at-risk communities and to communities of interest?				
6. Are community-based risk-reduction activities conducted during all stages of fire-management activity: pre-fire, during fire events and post-fire?				
7. Are the negative and positive effects of fire balanced on communities when utilizing fire as a land-management tool?				
8. Are communities empowered to accept responsibility for the management of fire and its effects on their health, safety and welfare?				
Additional comments:				
Principle 3. Traditional uses of fire The traditional uses of fire on the lands of indigenous peoples and traditional rural communities should remain as a practice for those communities and be adapted to the current environment.				
1. Is the traditional use of fire continued, provided that any potential negative impacts on communities and resources are prevented or mitigated?				
2. Is the traditional lore and knowledge of indigenous and traditional peoples gathered and maintained and are their practices integrated into a modern fire-management programme?				
3. Is a range of landscapes and environments (that provide diversity of habitats, species, resources and opportunities for recreation, commerce, community enjoyment and cultural and religious practices) maintained?				
Additional comments:				

Economic principles				
	Adequately addressed	**Needs attention**	**Needs substantial attention**	**Not applicable**
Principle 4. Protecting lives and assets The destructive impacts of unplanned fires on lives, property and resources should be minimized, if not totally prevented.				
1. Is the likelihood of unwanted, damaging fire minimized or prevented through knowledge, training, participatory planning and preparation, and appropriate suppression and mitigation systems?	🟩	🟨	🟥	⬜
2. Are the unwanted and unplanned fires responded promptly and safely?	🟩	🟨	🟥	⬜
3. Is fire actively managed to protect lives, property and resources during fire suppression, including the use of fire as a suppressive agent?	🟩	🟨	🟥	⬜
4. Are operations done in an environmentally sensitive manner while suppressing fires and restoring altered or damaged lands in order to lessen severe, long-term impacts?	🟩	🟨	🟥	⬜
5. Is the planning, construction and location of new buildings and adjacent vegetation influenced to minimize the risk of damage from fires, and discouraging inappropriate development in fire-prone ecosystems?	🟩	🟨	🟥	⬜
6. Is the planning and implementation of fire-prone activities in agriculture, forestry and other industries influenced in order to minimize the risk of damage from unplanned fires to lives, property and resources?	🟩	🟨	🟥	⬜
7. Is allocating resources based on the probability of ignition and expected fire behaviour, and balancing the costs of fire prevention, preparedness and suppression?	🟩	🟨	🟥	⬜
Additional comments:				
Principle 5. Economic impact An effective and efficient fire-management programme requires a balance between the benefits society receives from the use of fire and the costs, damages or undesirable impacts caused by unwanted fire.				
1. Are ecosystem benefits, costs and economic outputs fully accounted from the use of fire for resource management and the public good?	🟩	🟨	🟥	⬜
2. Are benefits of mitigating the unwanted effects or damages to lands and resources from unwanted fires identified?	🟩	🟨	🟥	⬜
3. Are all fire-management strategies and fire-use programmes developed and implemented in order to maximize both the ecological and environmental benefits and the economic return?	🟩	🟨	🟥	⬜
4. Are methodologies and standards developed for quantifying positive and negative fire effects and assessing fire damage (including effects on non-economic or non-commodity values, as well as on other social and environmental values)?	🟩	🟨	🟥	⬜
Additional comments:				

Environmental principles

Principle 6. Interactions between climate change and fire The interactions of climate change with vegetation cover and fire regimes should be understood and appropriately considered in the planning and implementation of fire use.	Adequately addressed	Needs attention	Needs substantial attention	Not applicable
1. Are the impacts of regional climate change on ecosystem properties and fire regimes defined?				
2. Are the fire-management plans and policies modified to take into account observed and anticipated changes in fuel and vegetation type, burning conditions and additional fire risk as a result of climate change?				
3. Are forest and other fuels utilized for energy production, with the dual goals of reducing the threat from fire and the consumption of fossil fuels?				
4. Is the storage of carbon maximized in ecosystems – especially during restoration of degraded ecosystems – without increasing the likelihood of unwanted fire risk and promoting the regeneration of carbon sinks?				
5. Are the greenhouse gas emissions minimized that occur as a result of large-scale, unwanted fire by restoring and maintaining ecologically appropriate fire regimes?				
6. Are the short- and long-term consequences of fire-induced vegetation depletion, such as soil erosion, landslides, floods, waterway pollution and desertification minimized and mitigated?				
Additional comments:				
Principle 7. Fire effects on ecosystems Fire should be managed in an environmentally responsible manner to ensure properly functioning and sustainable ecosystems into the future.				
1. Are fire-sensitive ecosystems protected?				
2. Is it recognized that strategically placed, planned burning with some short-term negative environmental impacts may be necessary for long-term landscape and community asset protection?				
3. Are principles of environmental management applied and the prevention of environmental disturbances resulting from fire-management activities cared?				
4. Are the planning fire preparedness and suppression operations within a holistic landscape view that considers archaeological, historical, cultural and traditional heritage values?				
5. Is the re-establishment of ecological processes (with the restoration of native flora and fauna that may have been compromised) damaged or eliminated by fire-suppression actions promoted?				
6. Is the introduction and spread of pest or invasive plants and animals, plant diseases, insect pests and biological contaminants after fires or fire-suppression activities minimized and prevented?				

	Adequately addressed	Needs attention	Needs substantial attention	Not applicable
7. Are planned burns conducted in a manner that minimizes the spread of unwanted alien species and promotes or re-establishes natural or other preferred species?				

Additional Comments:

Institutional principles

	Adequately addressed	Needs attention	Needs substantial attention	Not applicable
Principle 8. Legislation and governance All fire-management activities should be based on a legal framework and supported by clear policy and procedures.				
1. Are the principles and strategic actions used as a basis for developing and implementing national or local legislation?				
2. Are the guidelines for planned burning that fit within the legal framework and policies developed?				
3. Is it recognized that implementation of the strategic actions may impact on, or be impacted by, other sectors (such as forestry, agriculture, conservation, the environment, air-quality management, climatology, hydrology and broader land-use management) and emphasized coordination with those sectors?				

Additional comments:

	Adequately addressed	Needs attention	Needs substantial attention	Not applicable
Principle 9. Multistakeholder approach Successful fire management requires participatory approaches to leadership and management that are appropriately shared by public and private landholders, the fire services and communities of interest.				
1. Are the incidences of unwanted, human-caused fires minimized?				
2. Are the integrated land-management objectives such as safety and environmental and resource management met?				
3. Is the leadership role of land managers in fire and other land-use issues recognized?				
4. Is a coordinated approach to effective fire management ensured in areas where multiple organizations and stakeholders have responsibilities and interests in the fire programme?				
5. Is the knowledge, leadership and expertise of local citizens and community groups recognized and used?				

	Adequately addressed	Needs attention	Needs substantial attention	Not applicable
6. Are the community members at the local, sub- national, national, regional and international level involved to ensure that processes are open and accessible to people of different backgrounds and cultures (especially indigenous and traditional rural communities)?				
7. Is cross- sectoral participation encouraged in the development and implementation of plans, including community members, land managers, fire agencies, emergency services, enforcement and medical agencies, non-governmental organizations and the media?				
8. Is it acknowledged that fire-management plans and fire occurrence at the local level can have international and global impacts on the environment?				
9. Are the different backgrounds and roles of the urban, structural fire services and the land-management and rural fire services understood, and are each of them utilized to the best advantage, based on the strengths of each?				
10. Are the volunteer groups, community members and rural workers trained and equipped in order to enhance their role and effectiveness in fire-management activities?				

Additional comments:

Enhanced fire-management capacity

Principle 10. Cooperation Few nations and no single agencies or communities have the ability to manage every situation. As fires routinely affect multiple jurisdictions, agencies should develop cooperative arrangements to mitigate transboundary impacts.	Adequately addressed	Needs attention	Needs substantial attention	Not applicable
1. Is the use of common terminology, systems and standards encouraged to enhance international cooperation?				
2. Is an ongoing exchange of knowledge, technology and resources promoted to facilitate rapid international response to fires?				
3. Is there participation in international organizations, networks, fora and activities to enhance domestic and international capacity and rapid international response?				
4. Are the available guidelines (and examples of successfully implemented agreements as a framework for the development of binding and non-binding international instruments) used?				

Additional comments:

Principle 11. Knowledge transfer Access to and appropriate application of knowledge are essential in all fire management activities.	Adequately addressed	Needs attention	Needs substantial attention	Not applicable
1. Is there engagement in quality scientific research for the creation of new knowledge and confirmation of the utility of firefighters' practical knowledge in order to support the creation or improvement of policies, regulations, guidelines and practices?				
2. Is a two-way flow of information developed so that local knowledge of the environment and the historical uses of fire can be considered and used by managers and researchers?				
3. Is appropriate knowledge and skills development provided for personnel involved in fire activities to render them competent for their roles and tasks?				
4. Is effective communication incorporated and community education provided on fire-management issues in order to enhance community preparedness and response?				
5. Is traditional, local knowledge collected and is that knowledge used in appropriate aspects of the fire-management programme?				
6. Is there communication to the members of local communities and communities of interest, that properly applied and managed fire can result in positive ecological, cultural and economic benefits?				
7. Are scientific, research and technical materials translated and made accessible, at the appropriate technical level, to local managers, firefighters and communities?				
Additional comments:				

Annex 3. Multi – Stakeholder Needs Analysis: Strategic Actions

1. Fire and resource management planning	Adequately addressed	Needs attention	Needs substantial attention	Not applicable	External support needed	
					yes	no
1. Are all fire-management plans and activities based on a clear and comprehensive policy, legal and institutional framework?	🟩	🟨	🟥	⬜	🟩	🟥
2. Are plans prepared at an appropriate level of detail for every aspect of fire management (including use, prevention, fuel management, detection, initial attack, large-fire suppression and restoration)?	🟩	🟨	🟥	⬜	🟩	🟥
3. Is a policy established that sets the safety of firefighters, fire managers and the public as the highest priority?	🟩	🟨	🟥	⬜	🟩	🟥
4. Is a process developed to determine in advance of a fire, who will assume the lead role and duties (in areas where multiple agencies or organizations have fire-management responsibilities)?	🟩	🟨	🟥	⬜	🟩	🟥
5. Do resource-management plans include analysis of the actions that increase or decrease the risk and hazards affecting 1. fire behaviour, 2. fire damage or benefit, 3. impacts on the safety of firefighters, fire managers and the public?	🟩	🟨	🟥	⬜	🟩	🟥
6. Are plans based on the types of ecosystems, potential fire effects, fire regimes, and social, economic and environmental values?	🟩	🟨	🟥	⬜	🟩	🟥
7. Do plans provide (for infrequent but potentially damaging events) analysis, planning and identification of the resources and potential operational actions required?	🟩	🟨	🟥	⬜	🟩	🟥
8. Are plans based on climate, realistic weather forecasts and the effect on fire behaviour and suppression effectiveness and include maps indicating forecast fire danger?	🟩	🟨	🟥	⬜	🟩	🟥
9. Have organizations, agencies, governments and communities developed a process for involving local communities, communities of interest and others when preparing resource- and fire-management plans?	🟩	🟨	🟥	⬜	🟩	🟥
10. Do plans provide (for a system of monitoring and evaluation) a feedback process for amending or adapting the plans based on evaluations or changing conditions?	🟩	🟨	🟥	⬜	🟩	🟥

Additional comments:

2. Fire management in natural or protected areas and reserves	Adequately addressed	Needs attention	Needs substantial attention	Not applicable	External support needed	
					yes	no
1. Do fire plans and guidelines identify the unique character of and objectives for the area (considering the role that fire plays in restoring or maintaining that special character)?						
2. Are communities and people outside the area taken into account (in areas that require periodic fire to restore or maintain the character of the area)?						
3. Is consideration given to using appropriate fire-management actions that will not adversely impact surrounding areas, assets or sustainable livelihoods?						
4. Are plans, guidelines and operational procedures developed with a view to mitigating any unwanted or damaging impacts from planned burning in these areas?						
5. Is care taken to ensure that invasive plants or diseases are not introduced through fire-suppression actions and the use of fire equipment and machinery?						
6. Are suppression tactics planned and implemented with a view to mitigating damaging effects (on the protected area from crews, equipment and suppression actions), when fires occur in fire-intolerant areas (or when a particular fire incident is uncharacteristically severe or damaging)?						
7. Where fire-dependent natural areas or reserves are located adjacent to valuable commercial or agricultural areas, are detailed plans developed to ensure that the unique character and value of the areas can be maintained, while limiting the impact on adjacent areas?						
Additional comments:						

3. Fire awareness and education					yes	no
1. Are fire awareness and educational programmes developed and targeted to specific audiences and communities?						
2. Are programmes sensitive to the cultural and social norms of the community (including the application of fires to agricultural, forestry, biodiversity and traditional uses or to other basic needs)?						
3. Are fire awareness and educational materials gender sensitive and reflect local literacy levels (including oral presentation where printed material or local language barriers limit effective communication)?						
4. Are age-appropriate information and educational materials developed cooperatively (by technical experts and educational specialists and provided to all levels) introducing ecological and fire-management concepts into local schools?						
5. Are primary and secondary schools, universities, non-governmental organizations and other institutions encouraged to develop communally and ecologically appropriate fire-management programmes for teachers and other educators (based on local conditions and beliefs)?						
Additional comments:						

4. Fire prevention	Adequately addressed	Needs attention	Needs substantial attention	Not applicable	External support needed	
					yes	no
1. Are comprehensive prevention plans developed in areas in which objectives require minimizing the number of fires and the area burned?						
2. Do prevention plans take into account traditional uses of fire, be based on laws or regulations restricting fires and involve local community leaders and organizations?						
3. Is data collected on a monthly and annual basis (on frequency, specific causes and locations of human-caused fires, reasons for starting the fires, and area burned) in order to establish an effective prevention programme?						
4. Do fire-prevention programmes include information on the need to use and manage fire in certain situations?						
Additional comments:						

5. Fire danger rating and early warning systems					yes	no
1. Has country or organizations established a fire danger rating system or adapted an existing system to the local environment, based on land cover, vegetation and daily weather data?						
2. Have countries or regions installed a national or regional early warning system, using existing, demonstrated science and technologies and based on a local fire danger rating system?						
3. Has an information network been developed to provide reliable early warning of fire danger quickly to local authorities, landowners and communities?						
Additional comments:						

6. Fire preparedness, including technical training	Adequately addressed	Needs attention	Needs substantial attention	Not applicable	External support needed	
					yes	no
1. Do preparedness plans include all activities to be undertaken prior to the start of a fire?	🟩	🟨	🟥	⬜	🟩	🟥
2. Are safety considerations, both for firefighters and the public, a key component of any preparedness plan?	🟩	🟨	🟥	⬜	🟩	🟥
3. Are plans and implementation based on an effective and cost-efficient mix of resources and organizations?	🟩	🟨	🟥	⬜	🟩	🟥
4. Do plans take ecological considerations into account, such as the impact of suppression actions on the environment and the role of fire in the ecosystem or in cultural areas?	🟩	🟨	🟥	⬜	🟩	🟥
5. Do plans include processes and procedures to assess risk and hazard and to determine appropriate response and mitigation actions?	🟩	🟨	🟥	⬜	🟩	🟥
6. Are plans based on predicted fire risk, and staffing and availability levels identified (that correspond to the level of risk)?	🟩	🟨	🟥	⬜	🟩	🟥
7. Do plans assess the capabilities of remote communities and individuals living in outlying areas to protect their own assets and assist fire services (in all phases of fire management)?	🟩	🟨	🟥	⬜	🟩	🟥
8. Is all training appropriate to local ecological, social and political conditions and delivered to the same standard for full-time, paid, volunteer or other rural workers (for the expected fire characteristics)?	🟩	🟨	🟥	⬜	🟩	🟥
Additional comments:						

7. Pre-fire-season activities					yes	no
1. Do all parties (to an agreement) hold an annual pre-fire-season meeting to review the agreement and discuss changes and improvements to the annual operating plan?	🟩	🟨	🟥	⬜	🟩	🟥
2. Are civilians, collaborators and other affected members of the public informed of plans and procedures that provide for or enhance public safety?	🟩	🟨	🟥	⬜	🟩	🟥
3. Are arrangements with landowners established if access through their property might be required for fire-management activities (including fire detection)?	🟩	🟨	🟥	⬜	🟩	🟥
4. Are agreements concluded with utilities, transportation agencies and other sectors that might be damaged by fire or fire-suppression actions (These include actions to be taken by the collaborators in support of the fire-suppression effort or to protect firefighters and the public)?	🟩	🟨	🟥	⬜	🟩	🟥
Additional comments:						

8. Fire detection, communications and dispatching	Adequately addressed	Needs attention	Needs substantial attention	Not applicable	External support needed	
					yes	no
1. Does a robust fire detection system use an appropriate combination of remote sensing, established land- or water-based locations, aerial routes and private citizen and rural community networks?						
2. Is a public communications system in place for 1. the reporting of fires by private citizens and agency personnel and 2. for alerting managers, supervisors, landowners and citizens?						
3. Is a dispatch and communications system in place 1. to determine the appropriate response to a reported fire, mobilize and support initial-attack and backup fire-suppression resources, and 2. provide appropriate information to responders, volunteers, landowners and others involved in the incident response?						
4. Is a communications plan developed and translated into local languages to inform the public of threats and potential severe conditions (and to provide prevention messages)?						

Additional comments:

9. Initial attack/action					yes	no
1. Is the initial-attack organization properly trained, equipped, supported and staffed to meet local requirements?						
2. Are all initial-attack actions based on the resource, cultural, economic and ecological objectives and policies for the area (and include the appropriate use of tactics and equipment)?						
3. Does the initial-attack organization utilize local resources (in order to build support within the community for fire-management policies and plans and to gain from local knowledge and experience)?						
4. Does the initial-attack organization have access to communications systems to receive timely information on fire starts, locations and status (from official sources and from the public)?						
5. Is the initial-attack organization trained and prepared for the transition activities required when fires escape and become larger (requiring large-fire suppression strategies and tactics to be formulated and applied across the incident)?						
6. Based on the requirements of the legislative framework, is the initial-attack organization 1. prepared for non-fire activities, such as protecting private citizens and directing evacuation, and 2. is it trained in rescue and emergency medical procedures?						
7. Is the initial-attack organization trained to collect data and prepare evaluations and reports in order to improve organizational effectiveness and to work with the media in keeping citizens informed?						

Additional comments:

10. Large-fire suppression and management	Adequately addressed	Needs attention	Needs substantial attention	Not applicable	External support needed	
					yes	no
1. Are plans and procedures established for large-fire suppression based on expected size, duration and complexity?	🟩	🟨	🟥	⬜	🟩	🟥
2. Is an extensive process in place to gather intelligence and information on all aspects of a large fire in order to ensure effective planning, strategy formulation and community involvement?	🟩	🟨	🟥	⬜	🟩	🟥
3. Is a versatile and expandable management system, such as ICS, used to manage fires of all sizes and complexities (in order to minimize confusion and risk during transition periods)?	🟩	🟨	🟥	⬜	🟩	🟥
4. Are pre-fire-season agreements prepared that provide for assistance during large fires when local resources are fully committed.	🟩	🟨	🟥	⬜	🟩	🟥
5. Is a process of review, evaluation and training in place (so that personnel recognize the conditions under which a large fire is likely to occur and ascertain that prompt and adequate steps are taken in anticipation of the event)?	🟩	🟨	🟥	⬜	🟩	🟥
6. Do plans contain provisions for evaluating large fires to determine if some or all of the fire can be managed in a manner that benefits the ecosystem, reduces the risk to fire-suppression personnel and minimizes costs?	🟩	🟨	🟥	⬜	🟩	🟥
7. Do plans include risk analysis of the probability and consequences of failure in meeting plan objectives?	🟩	🟨	🟥	⬜	🟩	🟥
Additional comments:						

11. Managing multiple incidents					yes	no
1. Prior to the start of the fire season, are plans developed for the management (provide resource-allocation, prioritization and other transboundary actions required during multiple incidents)?	🟩	🟨	🟥	⬜	🟩	🟥
2. Is a group of senior management personnel established (representing each jurisdiction involved to decide protection and resource-allocation priorities through coordinated management direction and policy implementation)?	🟩	🟨	🟥	⬜	🟩	🟥
3. Is consideration given to the possibility that additional fires will start and to allocation of suppression resources (to reduce the potential of additional large and damaging fires occurring) in critical areas?	🟩	🟨	🟥	⬜	🟩	🟥
4. Have the agencies, groups and other organizations involved acquired (in all jurisdictions and in response to any type of fire or other emergency) the experience to effectively use the ICS system in transboundary and multiple fire situations?	🟩	🟨	🟥	⬜	🟩	🟥
Additional comments:						

12. Fuel management	Adequately addressed	Needs attention	Needs substantial attention	Not applicable	External support needed	
					yes	no
1. Is a fuel-management programme part of a complete fire-management programme?	🟩	🟨	🟥	⬜	🟩	🟥
2. Does a fire-management programme include fuel-treatment activities (to facilitate effective fire suppression and protection of communities and resources)?	🟩	🟨	🟥	⬜	🟩	🟥
3. Does a fuel-reduction programme consider the potential uses of debris and vegetation (and, where appropriate, encourage local communities to use wood for fuel and perhaps grasses and shrubs for grazing or other community needs)?	🟩	🟨	🟥	⬜	🟩	🟥
4. Do plans to use mechanized equipment assess the potential damage from the equipment and seek to mitigate this potential or ensure that the benefits outweigh the potential risks?	🟩	🟨	🟥	⬜	🟩	🟥

Additional comments:

13. Planned fire					yes	no
1. Are impacts on human health and air quality considered when conducting planned burns?	🟩	🟨	🟥	⬜	🟩	🟥
2. Prior to the reintroduction of fire, do plans include consideration of the impacts of long-term fire exclusion on resources, vegetation and ecosystem and human health?	🟩	🟨	🟥	⬜	🟩	🟥
3. Based on the complexity and potential risk, are planned burns undertaken only after plans have been developed (that consider operational procedures for safe work practices, predicted environmental effects and the expected fire behaviour needed to produce the predicted effects)?	🟩	🟨	🟥	⬜	🟩	🟥
4. Are the results of the burns monitored and recorded and used to revise operating plans, procedures, environmental parameters and contingency plans?	🟩	🟨	🟥	⬜	🟩	🟥
5. Does a contingency plan address the potential of fires to escape and damage resources, property, habitats and communities or to threaten the safety of agency personnel or private citizens?	🟩	🟨	🟥	⬜	🟩	🟥

Additional comments:

14. Burned area restoration and rehabilitation	Adequately addressed	Needs attention	Needs substantial attention	Not applicable	External support needed	
					yes	no
1. Is every burned-area rehabilitation and restoration plan based on the planned or natural fire regime for the area and include actions that facilitate a restored, healthy sustainable ecosystem or cultural area?						
2. Does every fire-suppression plan consider the need for immediate corrective action that will mitigate further damage resulting from the suppression, such as constructing fire breaks or other disturbance activity?						
3. Where natural processes are not expected to provide adequate regeneration, are rehabilitation plans developed that use plants, trees and grasses native to the ecosystem and that will not cause damage or unexpected consequences?						
4. Is care taken to ensure that seed sources are reasonably free from contaminants such as seeds of invasive species?						
Additional comments:						

15. Monitoring and assessment					yes	no
1. Is a comprehensive plan for monitoring and assessing all aspects of the fire-management programme implemented?						
2. Is a safety programme (including analysis of near-miss incidents, accident reports and a review of lessons learned) implemented and monitored to reduce the risk to firefighters, fire managers and the public?						
3. Is information and data from the fire prevention programme used to develop a monitoring system that measures the effectiveness of fire prevention efforts?						
4. Is a programme implemented to monitor the ecological effects of fire and of suppression methods (should include cooperation with universities, research organizations and local communities)?						
Additional comments:						

Annex 4. Action framework

	Description summary	Assumptions	Stakeholders	Time framework	Budget framework
Problem	• Specific problem to be addressed • Causes of the problem • Effects of the problem • Impacts without action				
Defining the 3-5 Year Programme					
Impact	• The long-term benefits that will happen partly as a result of the project	• External factors that could influence (positive or negative) the programme • Factors that cannot be directly controlled by the project managers.	• Who are the key stakeholders in the technical and geographic focus area(s)	• Timetable of the different outputs and actions to be undertaken	• Budget needed Possible funding sources
Outcome	• List the immediate change that we want to achieve • Why is the intervention needed? • How will others change their behaviour as a result of the use, uptake or implementation of the outputs? • How will development conditions improve on completion of the outputs?				
Output	• List the measurable end results of the planned activities • What products or services will the programme be directly responsible for, given the necessary resources?				
Action	• What actions needs to be undertaken to achieve the outputs?				

WORKING PAPERS SERIES ON FIRE MANAGEMENT

Fire Management Working Papers: Thematic Paper Series

Note:
In Code "Working Paper FFM/xx", "x" indicates the WP series number and a suffix E, F, R or S indicates: E = English, F = French, R= Russian or S = Spanish. No suffix indicates E only.

Available at the Fire Management web site:

Working Paper FPF/1	*Guidelines on Fire Management in Temperate and Boreal Forests.* November 2002.
Working Paper FM/2	*International Wildland Fire Management Agreements Template.* Tom Frey, Ricardo Vélez Muñoz. January 2004.
Working Paper FM/3	*Legal Frameworks for Forest Fire Management: International Agreements and National Legislation*. Fernando Fernández Arriaga, Frédéric St-Martin, Tom Frey, Ricardo Vélez Muñoz. March 2004.
Working Paper FM/4	*Community-Based Fire Management in Spain*. Ricardo Vélez Muñoz. April 2005.
Working Paper FM/5	*Report on Fires in the South American Region*. María Isabel Manta Nolasco. March 2006.
Working Paper FM/6	*Report on Fires in the North East Asian Region*. Leonid Kondrashov. March 2006.
Working Paper FM/7	*Report on Fires in the Baltic Region and adjacent countries*. Ilkka Vanha-Majamaa. March 2006.
Working Paper FM/8	*Report on Fires in the Mediterranean Region*. A.P. Dimitrakopoulos and I.D. Mitsopoulos. March 2006.
Working Paper FM/9	*Report on Fires in the Sub-Saharan Africa (SSA) Region*. Alexander Held. March 2006.
Working Paper FM/10	*Report on Fires in the South East Asian Region*. B.J. Shields, R.W. Smith and D. Ganz. March 2006.
Working Paper FM/11	*Report on Fires in the Balkan Region*. N. Nikolov. March 2006.
Working Paper FM/12	*Report on Fires in the Caribbean and Mesoamerican Regions*. A.M.J. Robbins. March 2006.
Working Paper FM/13	*Report on Fires in the Australasian Region*. P.F. Moore. March 2006.
Working Paper FM/14	*Report on Fires in the South Asian Region*. A.M. Benndorf and J.G. Goldammer. March 2006.
Working Paper FM/15	*Report on Fires in the North American Region*. R. Martínez, B.J. Stocks and D. Truesdale. March 2006.
Working Paper FM/16	*Report on Fires in the Central Asian Region and adjacent countries*. Johann G. Goldammer. March 2006.
Working Paper FM/17	Fire management: voluntary guidelines. Principles and strategic actions. 2006. FAO, Rome, December, 2006 (E, F, R, S)
Working Paper FM/18	Fire management: Review of international cooperation. FAO, Rome, December 2006
Working Paper FM/19	Fire management voluntary guidelines - Preparing for action - country and regional level methodology. Vuorinen A. P., Rosengren, L.M. 2008