

**SUMMARY SUBMISSIONS OF THE 2013 IPPC CALL FOR TOPICS**

| No.                              | Title (type of topic)  | Proposed by/ supported by  | Secretariat note   |
|----------------------------------|--|--|--|
| <b>SUBMISSIONS FOR NEW ISPMs</b> |  |  |  |
| 1                                | ISPM XX:20XX General principles for operation of laboratories  | European plant protection Organization (EPPO)/ EU  | Draft specification provided (see <a href="#">Attachment 3</a> )   |
| 2                                | ISPM XX:20XX Criteria for the determination of host status for all arthropod and pathogen pests based on available information | USA  | Draft specification provided (see <a href="#">Attachment 4</a> )   |
| 3                                | ISPM XX:20XX Guidance on pest risk management  | USA  | Draft specification provided (see <a href="#">Attachment 5</a> )   |
| 4                                | ISPM XX:20XX Guidelines for the approval of fumigation facilities  | Australia  | Draft specification provided (see <a href="#">Attachment 6</a> )   |
| 5                                | ISPM XX:20XX Guidelines for the approval of irradiation facilities   | Australia  | Draft specification provided (see <a href="#">Attachment 7</a> )   |
| 6                                | ISPM XX:20XX Authorization of non-NPPO Entities to Perform Phytosanitary Actions   | Canada   | Draft specification provided (see <a href="#">Attachment 8</a> )   |
| 7                                | ISPM XX: 20XX Guidelines for the use of chemical treatments as a phytosanitary measure   | TPPT/ Supported by: NPPO of Australia, IAPSC, NPPO of Indonesia, NPPO of USA, APPPC, EPPO, NEPPO, COSAVE | Draft specification provided (see <a href="#">Attachment 9</a> )   |
| 8                                | ISPM XX: 20XX Guidelines for the use of fumigation as a phytosanitary measure  | TPPT/ Supported by NPPO of Australia, IAPSC, NPPO of Indonesia, NPPO of USA, APPPC, EPPO, NEPPO, COSAVE  | TPPT position paper on two separate standards is attached<br>Draft specification provided (see <a href="#">Attachment 10</a> ) |
| 9                                | ISPM XX:20XX Guidelines for the use of temperature treatments as a phytosanitary measure                                       | TPPT/ Supported by: NPPO of Australia, IAPSC, NPPO of Indonesia, NPPO of USA, APPPC, EPPO, NEPPO, COSAVE | Draft specification provided (see <a href="#">Attachment 11</a> )  |
| 10                               | ISPM XX: 20XX Guidelines for the use of modified atmosphere treatments as a phytosanitary measure                              | TPPT/ Supported by: NPPO of Australia, IAPSC, NPPO of Indonesia, NPPO of USA, APPPC, EPPO, NEPPO, COSAVE | Draft specification provided (see <a href="#">Attachment 12</a> )  |
| 11                               | Quarantine management with wood export and transportation  | China  | No submission form provided or draft specification   |
| 12                               | Movement of plants and plant products in association with international and postal articles                                    | China  | No submission form provided or draft specification   |

| No.                                  | Title (type of topic)  | Proposed by/ supported by  | Secretariat note   |
|--------------------------------------|--|--|--|
| 13                                   | Plant material for exhibition  | China  | No submission form provided or draft specification                   |
| 14                                   | Guidelines for preliminary examination for original places of the input plants and their products                                | China  | No submission form provided or draft specification                   |
| 15                                   | Minimizing pest movement by ore sand in international trade  | China  | No submission form provided or draft specification                   |
| <b>AMENDMENTS/REVISIONS TO ISPMS</b> |  |  |  |
| 16                                   | Revision of ISPM 5 <i>Glossary of Phytosanitary Terms</i><br><i>Add the terms alien species and invasive alien species</i>       | Convention of Biological Diversity (CBD)   | Draft specification provided (see <a href="#">Attachment 13</a> )    |
| 17                                   | ISPM 18: 20XX <i>Guidelines for the use of irradiation as a phytosanitary measure</i><br><i>(Revision to ISPM 18)</i>            | TPPT/ Supported by: NPPO of Australia, IAPSC, NPPO of Indonesia, NPPO of USA, APPPC, EPPO, NEPPO, COSAVE | Draft specification is provided (see <a href="#">Attachment 14</a> ) |
| <b>APPENDIXES TO ISPMS</b>           |  |  |  |
| 18                                   | Diversion from intended use (could be a new concept standard, an Appendix to ISPM 32, and/or could include revisions to ISPM 11) | USA  | Draft specification is provided (see <a href="#">Attachment 15</a> ) |
| 19                                   | Commodity classes (Appendix to ISPM 12)  | EPPO/ EU   | Draft specification is provided (see <a href="#">Attachment 16</a> ) |
| <b>ANNEXES TO ISPMS</b>              |  |  |  |
| 20                                   | Description of import requirements (Annex to ISPM 20)  | EPPO/ EU   | Draft specification is provided (see <a href="#">Attachment 17</a> ) |
| 21                                   | Diagnostic Protocol for <i>Cucumber green mottle mosaic virus</i> (Annex to ISPM 27)   | China  | No submission form provided or draft specification                   |
| 22                                   | Diagnostic Protocol for <i>Leptosphaeria maculans</i> (Annex to ISPM 27)   | China  | No submission form provided or draft specification                   |
| 23                                   | Diagnostic Protocol for <i>Brontispa longissima</i> (Annex to ISPM 27)   | China  | No submission form provided or draft specification                   |
| 24                                   | Diagnostic Protocol for <i>Chalara fraxinea</i> (Annex to ISPM 27)   | China  | No submission form provided or draft specification                   |
| 25                                   | Diagnostic Protocol for <i>Monilinia fructicola</i> (Annex to ISPM 27)   | China  | No submission form provided or draft specification                   |
| 26                                   | Diagnostic Protocol for <i>Cydia pomonella</i> (Annex to ISPM 27)  | China  | No submission form provided or draft specification                   |

| No.   | Title (type of topic)  | Proposed by/ supported by | Secretariat note   |
|---|--|---------------------------|--|
| <b>TOPICS TO BE REMOVED FROM THE LIST OF TOPICS</b> |  |                           |  |
| 27  | Surveillance for citrus canker ( <i>Xanthomonas axonopodis</i> pv. <i>citri</i> ) (2002-001)                       | USA                       | Position paper is attached (see <a href="#">Attachment 18</a> )                                |
| 28  | Systems approach for management of citrus canker ( <i>Xanthomonas axonopodis</i> pv. <i>citri</i> ) (2003-001)     | USA                       | Discussion paper is attached (see <a href="#">Attachment 18</a> )                              |
| 29  | Eliminate all treatment topics from the <i>List of topics</i>  | TPPT                      | TPPT position paper is attached (see <a href="#">Attachment 19</a> )                           |
| 30  | Soil and growing media in association with plants (2009-006) to be removed from the <i>List of topics</i> .        | TPPT                      | TPPT position paper is attached (see <a href="#">Attachment 19</a> )                           |
| <b>NEW TOPICS TO BE ADDED TO THE LIST OF TOPICS</b> |  |                           |  |
| 31  | Plants for planting treatments   | TPPT                      | Submission form provided (see <a href="#">Attachment 20</a> )<br>Specification is not required |
| 32  | Treatments for pests other than fruit flies  | TPPT                      | Submission form provided (see <a href="#">Attachment 21</a> )<br>Specification is not required |
| 33  | Treatments for wood and wood products  | TPPT                      | Submission form provided (see <a href="#">Attachment 22</a> )<br>Specification is not required |
| 34  | Temperature treatments for disinfestations of food crops by means of microwave processes using dielectric heating. | Italy                     | Submission form provided (see <a href="#">Attachment 23</a> )<br>Specification is not required |

## Criteria for justification and prioritization of proposed topics<sup>1</sup>

### **Core criteria**

1. Contribution to the purpose of the IPPC as described in article I.1.
2. Feasibility of implementation at the global level (includes ease of implementation, technical complexity, capacity of NPPOs to implement, relevance for more than one region).
3. Clear identification of the problems that need to be resolved through the development of the standard.
4. Availability of, or possibility to collect, information in support of the proposed standard (e.g. scientific, historical, technical information, experience).

### **Supporting criteria**

#### **Practical**

1. Feasibility of adopting the proposed standard within a reasonable time frame.
2. Stage of development of the proposed standard (is a standard on the same topic already widely used by NPPOs, RPPOs or a relevant international organization).
3. Availability of expertise needed to develop the proposed standard.

#### **Economic**

4. Estimated value of the plants protected.
5. Estimated value of trade affected by the proposed standard (e.g. volume of trade, value of trade, the percentage of Gross Domestic Product of this trade) if appropriate.
6. Estimated value of new trade opportunities provided by the approval of the proposed standard.
7. Potential benefits in terms of pest control or quarantine activities.

#### **Environmental**

8. Utility to reduce the potential negative environmental consequences of certain phytosanitary measures, for example reduction in global emissions for the protection of the ozone layer.
9. Utility in the management of non-indigenous species which are pests of plants (such as some invasive alien species).
10. Contribution to the protection of the environment, through the protection of wild flora, and their habitats and ecosystems, and of agricultural biodiversity.

#### **Strategic**

11. Extent of support for the proposed standard (e.g. one or more NPPOs or RPPOs have requested it, or one or more RPPOs have adopted a standard on the same topic).
12. Frequency with which the issue addressed by the proposed standard emerges as a source of trade disruption (e.g. disputes or need for repeated bilateral discussions, number of times per year trade is disrupted).
13. Relevance and utility to developing countries.
14. Coverage (application to a wide range of countries/pests/commodities).
15. Complements other standards (e.g. potential for the standard to be used as part of a systems approach for one pest, complement treatments for other pests).
16. Foundation standards to address fundamental concepts (e.g. treatment efficacy, inspection methodology).
17. Expected standard longevity (e.g. future trade needs, suggested use of easily outdated technology or products).
18. Urgent need for the standard.

---

<sup>1</sup> CPM-3 (2008) report, Paragraph 89.3 and Appendix 8: <https://www.ippc.int/core-activities/governance/cpm>

**Attachment 3: Submission No. 1****Title (type of topic):** ISPM XX:20XX General principles for operation of laboratories**Proposed by/ supported by:** EPPO/EU**Submission form for IPPC standard setting work programme topics****Proposed by:** EPPO**Contact:**

Name: Jean PERCHET

Position and organization: Scientific officer, EPPO

Mailing address: 21 boulevard Richard Lenoir 75011 PARIS France

Phone: + 33 (0) 1 45 20 77 94

Fax: + 33 (0) 1 70 76 65 47 E-mail: [jp@eppo.int](mailto:jp@eppo.int)**Type of topic:** (Choose one box only)**A. New ISPM:**

- Concept  
 Pest specific  
 Commodity specific  
 Reference

**B. New component to an existing ISPM:**

- Supplement  
 Annex  
 Appendix  
 Technical Panel (technical area)  
 DP: Diagnostic protocol (subject)  
 PT: Phytosanitary treatment (topic)  
 Glossary term (subject)

**C. Revision/Amendment of:**

- ISPM  
 Supplement  
 Annex  
 Appendix  
 Glossary term

**Proposed title of new ISPM or component:** or **Title of document to be revised or amended:**

GENERAL PRINCIPLES FOR OPERATION OF LABORATORIES

**Summary justification for the proposal (2 lines max.):**

To ensure that general principles for operation of laboratories are clearly presented, described and summarised to ensure ..that importing contracting parties may accept the results with the confidence as dependable and comparable.

or

..that results may be acceptable with confidence as dependable and comparable information by importing countries.

**Submissions should address the applicable criteria for justification of the proposal (as listed below). Where possible, information in support of the justification and that may assist in the prioritization should be indicated.**

**All core criteria must be addressed; supporting criteria should be addressed if applicable**

**Core criteria:**

Accurate and reliable diagnosis of pests is a key requirement for the operation of phytosanitary systems and to facilitate fair and phytosanitary secure international trade. For example, pest diagnosis may be required prior to export certification and issuance of phytosanitary certificates, for surveillance, pest reporting, pest listing, pest risk analysis and determining phytosanitary import requirements.

ISPM 27 (Diagnostic protocols for regulated pests) provides details of the structure and content of diagnostic protocols and procedures and methods for official diagnoses that are relevant to international trade. However, there is no standard or information about general principles for operation of such official laboratories and this is needed to facilitate phytosanitary activities above and for the principles of transparency, harmonisation and non-discrimination.

Reliability, dependability and transparency of methods and procedures is also required to allow comparison of results in-between laboratories (disputes) or to help to detect pests in other countries, as each country does not test samples on each pest (laboratories have specialists, reagents and methodology to detect specific pests and sometimes it is not possible to detect other pests).

**Contribution to the purpose of the IPPC as described in Article I.**

Yes – common and effective action to prevent the spread and introduction of pests of plants and plant products

|   |
|---|
| <p><b>Feasibility of implementation at the global level (includes ease of implementation, technical complexity, capacity of NPPOs to implement, relevance for more than one region).</b></p> <p>Yes- the proposed general principles for operation of laboratories should be straightforward for all countries to follow</p>  |
| <p><b>Clear identification of the problems that need to be resolved through the development of the standard.</b></p> <p>Yes – international problems may arise as this field internationally has not been harmonized</p>  |
| <p><b>Availability of, or possibility to collect, information in support of the proposed standard (e.g. scientific, historical, technical information, experience).</b></p> <p>Yes – situation, expertise in EPPO and contracting parties, experience with requirements for different kind of accreditations and systems.</p>   |
| <p><b><u>Supporting criteria (Practical)</u></b></p> <p>➤ <b>Feasibility of adopting the proposed standard within a reasonable time frame.</b></p> <p>It should be straightforward to produce a harmonised guidelines about organisation and administrative actions for laboratories work.</p> <p>➤ <b>Stage of development of the proposed standard (is a standard on the same topic already widely used by NPPOs, RPPOs or a relevant international organization).</b></p> <p>Some contracting parties have good systems in place</p> <p>➤ <b>Availability of expertise needed to develop the propose standard.</b></p> <p>Some contracting parties already has set main principles and tasks, requirements for laboratories, so experts will be available who would be able to give information</p>  |
| <p><b><u>Supporting criteria (Economic)</u></b></p> <p>➤ <b>Estimated value of the plants protected.</b></p> <ul style="list-style-type: none"> <li>· Appropriate testing helps to provide the goal to protect the plants.</li> </ul> <p>➤ <b>Estimated value of trade affected by the proposed standard (e.g. volume of trade, value of trade, the percentage of Gross Domestic Product of this trade) if appropriate.</b></p> <ul style="list-style-type: none"> <li>· All trade of plants and plant products or other regulated articles that need laboratory testing</li> </ul> <p>➤ <b>Estimated value of new trade opportunities provided by the approval of the proposed standard.</b></p> <ul style="list-style-type: none"> <li>· Difficult to estimate but there will be more reliable trade, less increase of imported pests.</li> <li>· It will reduce the numbers of non-compliances.</li> <li>· Contracting parties could rely on laboratories in other CPs to undertake testing of specific pests which they do not have the capability to detect themselves. This should increase the speed at which detection and an identification can be made</li> <li>· Disputes will reduce in the field of not appropriately detected pests.</li> <li>· For some countries, the exercise may reveal gaps and inconsistencies in their legislation, thus leading to improved harmonisation, acceptance, etc.</li> </ul> <p>➤ <b>Potential benefits in terms of pest control or quarantine activities.</b></p> <ul style="list-style-type: none"> <li>· Clear description of general and more specific principles for operation of laboratories should mean that they are more likely to be met and therefore trade will be safer.</li> </ul> |
| <p><b><u>Supporting criteria (Environmental)</u></b></p> <p>➤ <b>Utility to reduce the potential negative environmental consequences of certain phytosanitary measures, for example reduction in global emissions for the protection of the ozone layer.</b></p> <p>➤ <b>Utility in the management of non indigenous species which are pests of plants (such as some invasive alien species).</b></p> <p>➤ <b>Contribution to the protection of the environment, through the protection of wild flora, and their habitats and ecosystems, and of agricultural biodiversity.</b></p>   |

- The standard should address pest risks at the time of testing and disposal of waste from laboratory

**Supporting criteria (Strategic)**

- **Extent of support for the proposed standard (e.g. one or more NPPOs or RPPOs have requested it, or one or more RPPOs have adopted a standard on the same topic).**
  - Proposed and supported by EU and EPPO countries
- **Frequency with which the issue addressed by the proposed standard emerges as a source of trade disruption (e.g. disputes or need for repeated bilateral discussions, number of times per year trade is disrupted).**
  - Very frequent
- **Relevance and utility to developing countries.**
  - Very relevant
- **Coverage (application to a wide range of countries/pests/commodities).**
  - All trading countries which are contracting parties to the IPPC
- **Complements other standards (e.g. potential for the standard to be used as part of a systems approach for one pest, complement treatments for other pests).**
  - Complements ISPMs 1 (5 & 6 & 27)
- **Foundation standards to address fundamental concepts (e.g. treatment efficacy, inspection methodology).**
- **Expected standard longevity (e.g. future trade needs, suggested use of easily outdated technology or products).**
  - Helps contribute to basic principles according to ISPM 1 (sovereignty, necessity, managed risk, minimal impact, transparency, harmonization, non-discrimination, technical justification, cooperation, equivalence of phytosanitary measures and modification)
  - Should serve for many years
- **Urgent need for the standard.**
  - Yes – for transparency, reliability and dependability

## DRAFT SPECIFICATION (No. 1)

### **Proposed Title:**

GENERAL PRINCIPLES FOR OPERATION OF LABORATORIES

**Reason for the standard** (justification as to why the standard is needed, some of this can be copied from the above submission):

**The IPPC, in Article IVh and IV3.d V 1., VI 1., VIII 1.** Requires contracting parties to train and develop the staff; to develop other functions as may be required for the implementation of Convention; to make arrangements for phytosanitary certification to confirm certifying statement; to require equal measures, have technical justifications; to cooperate to the fullest practicable extent in achieving the aims of Convention.

ISPM 1 provides guidance on the basic principles and some operational principles which are related to administration of official phytosanitary systems, but does not provide any indication of the way in which laboratories should be operated to fulfill obligations of Convention properly. In practice, many contracting parties are using different accreditation processes for official laboratories as there are no IPPC guidelines that should be implemented. Many countries achieve this by setting their own systems that cannot be compared or aligned to other countries systems.

Given the complexities of phytosanitary import requirements it is often difficult for potential exporters or exporting contracting parties to understand the legislation and the technical requirements for specific plants, plant products or other regulated articles. In order to facilitate safe trade, increase transparency for everybody (including exporters) and improve efficiency, there is a need for a more standardized format for general principles for operation of laboratories.

This should help facilitate and ensure safe trade and reduce the costs of administration etc. because of a clear understanding of another country's systems and provided options that will help ensure that importing countries can rely on the process and results given by laboratories, thus reducing the risk of introduction of pests regulated by the importing country. The use of a standard guidelines should also reduce the need for bilateral contacts between the importing and exporting countries for clarification of their requirements and help overcome language barriers.

**Purpose** (explain what issue will be addressed and/or harmonized once this standard is put in place):

The purpose of this standard is to provide general principles for operation of laboratories to ensure that by fulfilling those principles test results may be accepted with confidence as dependable and comparable by importing countries.

**Scope** (this provides the boundaries or limits to what the standard should cover):

The scope of the standard will be limited to general principles for operation of laboratories including organizational and administrative actions for laboratories that are needed to give reliability to laboratories results.

**Tasks for the expert drafting group** (this will help direct the work of the experts):

The Working group should :

1. consider examples of principles for operation of laboratories that include organizational and administrative actions. Information can be gained from NPPOs and RPPOs
2. recommend the minimum requirements that should be included for each routine laboratory and more specific ones for more sophisticated tasks (more specific methods). Consideration should be given to requirements for all aspects of laboratory diagnosis, including facilities, equipment, working procedures, use of replicates and controls, training of staff and record keeping.
3. consider specific requirements for handling and diagnosis of types of pests and any examples of good practice that may be included as annexes or appendices. For example types of quarantine facilities for insects or growing on facilities for indexing of plants for viruses.
4. consider importance of how sample is taken and laboratory involvement in providing guidelines for sampling to get appropriate samples for testing afterwards;



5. consider requirements for addressing pest risks in samples at the time of testing and in disposal of waste.
6. consider requirements for obtaining, storing and recording control or reference material
7. consider ways for further consultation with, and involvement of, stakeholders on the subject of this standard during the development of this ISPM, as well as identifying key stakeholders whose specific comments should be sought in relation to the development of this standard, and provide recommendations on both these areas to the Standards Committee.
8. consider whether the new standard could affect in a specific way (positively or negatively) the protection of biodiversity and the environment, and if so, the impact should be identified, addressed and clarified in the draft standard.
9. consider implementation of the standard by contracting parties and identify potential operational and technical implementation issues. Provide information and possible recommendations on these issues to the SC

**Expertise** (this will provide the basis for screening nominations):

A working group of five to seven phytosanitary laboratory experts with extensive knowledge in laboratory accreditation and maintenance of phytosanitary safety in country by an NPPO or RPPO

**References** (Relevant ISPMs and national, regional or international standards on the same topic and any specific references that would be relevant during drafting):

**Literature review** (this section will provide a **summary of the topic** based on scientific and technical publications, including a referenced **list of literature reviewed**. This will help provide the scientific basis for the content of the standard to be used by the selected experts during the development of the standard):

**The IPPC Convention, in Article Ivh and IV3.d V 1., VI 1., VIII 1.** Requires contracting parties to train and develop the staff; to develop other functions as may be required for the implementation of Convention; to make arrangements for phytosanitary certification to confirm certifying statement; to require equal measures, have technical justifications; to cooperate to the fullest practicable extent in achieving the aims of Convention. ISPM 1 provides guidance on the basic principles and some operational principles which are related to administration of official phytosanitary systems, but does not provide any indication of the way in which laboratories should be operated to fulfill obligations of Convention properly. In practice, contracting parties are going throughout different accreditation processes or they are not doing it as there is no enough international guidelines that should be implemented. Many countries achieve this by setting their own systems that cannot be compared or aligned to other countries systems.

In Europe, at present many laboratories obtain accreditation in accordance with ISO/IEC 17025, using EPPO Standards PM 7/84 and PM 7/98 as a basis.

Many countries have attempted to summarise the requirements for laboratories.

EPPO also produced summaries of countries' systems and accreditations [http://archives.eppo.int/MEETINGS/2011\\_conferences/heads\\_labs.htm](http://archives.eppo.int/MEETINGS/2011_conferences/heads_labs.htm) ,

This complexity can make it difficult for importers and NPPOs of importing countries to determine whether principles for laboratory in an exporting country are equivalent to those in the importing country for further international movement.

The aim of the proposed standard is therefore to increase transparency of requirements by ensuring that they are set out in a harmonised way. This will help importers and NPPOs to understand and comply with requirements. It should also aid efficiency, for example for importers when preparing material for re-export, and improve planning and timing of NPPO inspections. Providing clear guidelines may also reduce the number of interceptions of pests and non-compliances.

The expert working group (EWG) will need to determine the minimum requirements for principles and actions and

the amount of detail. This should be done by reviewing examples of current best practice. The EWG will also need to consider whether different categories of requirements for and tasks should be developed.

**References**

EPPO PM 7/84 Basic requirements for quality management in plant pest diagnosis laboratories  
EPPO PM 7/98: Specific requirements for laboratories preparing accreditation for a plant pest diagnostic activity.  
ISO17025:2005, General requirements for the competence of testing and calibration laboratories

**Attachment 4: Submission No. 2**

**Title (type of topic):** ISPM XX:20XX Criteria for the determination of host status for all arthropod and pathogen pests based on available information

**Proposed by/ supported by:** USA

| <b>Submission form for IPPC standard setting work programme topics</b>   |  |  |
|--|--|--|
| <b>Proposed by:</b> Mr John Greifer (USA)  |  |  |
| <b>Contact:</b> (Contact information of an individual able to clarify issues relating to this submission)<br>Name: Mr John Greifer<br>Position and organization: Assistant Deputy Administrator for International Phytosanitary Standards<br>Mailing address: 1400 Independence Ave SW, Washington, DC 20250, USA<br>Phone : +1 202 799 7159 Fax : +1 202 690 0472<br>E-mail : <a href="mailto:John.K.Greifer@aphis.usda.gov">John.K.Greifer@aphis.usda.gov</a>  |  |  |
| <b>Type of topic:</b> (Choose one box only)  |  |  |
| C. New ISPM:<br><input checked="" type="checkbox"/> Concept<br><input type="checkbox"/> Pest specific<br><input type="checkbox"/> Commodity specific<br><input type="checkbox"/> Reference   | B. New component to an existing ISPM:<br><input type="checkbox"/> Supplement<br><input type="checkbox"/> Annex<br><input type="checkbox"/> Appendix<br><input type="checkbox"/> Technical Panel (technical area)<br><input type="checkbox"/> DP: Diagnostic protocol (subject)<br><input type="checkbox"/> PT: Phytosanitary treatment (topic)<br><input type="checkbox"/> Glossary term (subject) | C. Revision/Amendment of:<br><input type="checkbox"/> ISPM<br><input type="checkbox"/> Supplement<br><input type="checkbox"/> Annex<br><input type="checkbox"/> Appendix<br><input type="checkbox"/> Glossary term |
| <b>Proposed title of new ISPM or component:</b> _____ <b>or</b> _____ <b>Title of document to be revised or amended:</b>   |  |  |
| Criteria for the determination of host status for all arthropod and pathogen pests based on available information  |  |  |
| <b>Summary justification for the proposal (two sentences maximum):</b>   |  |  |
| <p>There are no international guidelines for determining host status based on available information (as opposed to research protocols) that apply to all organisms that may be pests. The draft ISPM on host status, presently undergoing substantial concerns review, is specific to fruit flies and does not provide detailed guidance on use of available information to make host status determinations. The use of inconsistent criteria for listing hosts of organisms has the potential to lead to disputes between NPPOs over whether organisms should be regulated on different hosts. The development of consistent criteria for determining host status will aid NPPOs in performing technically sound, science-based PRAs, and in ensuring that surveillance, inspection and other regulatory programs are appropriately targeted and technically justified.</p> |  |  |
| <p>Submissions should address the applicable criteria for justification of the proposal (as listed below). Where possible, information in support of the justification and that may assist in the prioritization should be indicated.<br/> <b>All core criteria must be addressed; supporting criteria should be addressed if applicable.</b></p>  |  |  |
| <b>Core criteria:</b>  |  |  |
| <b>Contribution to the purpose of the IPPC as described in Article I.1.</b>  |  |  |
| <p>Harmonized guidance for determining host status will help prevent disagreements over whether organisms should be regulated as pests and will assist contracting parties to take common and effective action to prevent the spread and introduction of pests of plants and plant products.</p>   |  |  |
| <b>Feasibility of implementation at the global level (includes ease of implementation, technical complexity, capacity of NPPOs to implement, relevance for more than one region).</b>  |  |  |
| <p>This standard on host status should be no more technically complex or more difficult to implement than existing concept standards and should be globally relevant.</p>  |  |  |

**Clear identification of the problems that need to be resolved through the development of the standard.**

Determining the host status of an organism is essential to several key activities undertaken by NPPOs. Determining the status of hosts with respect to organisms is one of the central pieces of information needed to conduct a pest risk analysis (PRA). The determination of host status can have major impacts on phytosanitary measures required for importing and exporting commodities, as well as domestic level decisions and actions (e.g. eradication programs, surveys, etc.). Host status issues are cross-cutting, and apply to almost all hosts, PRA, risk management, treatment development, and certification decisions. There is often controversy in interpreting information on host status which leads to potential disputes between NPPOs, even for organisms that are well understood. Host status may require regular review for several reasons:

- Errors in the literature or in databases and compendia (e.g. incorrect citations, incorrect interpretations, taxonomic misidentifications).
- Host status of a commodity may be variable depending on host and organism biology/physiology/phenology (e.g. changes in host status depending on season, ripeness or variety).
- Host status is unclear (lack of data in the literature, conflicting information, or only experimental hosts but lacking field data).
- Cases where an organism is associated with a commodity but may not be feeding on that commodity (e.g. contaminating pests;)

**Availability of, or possibility to collect, information in support of the proposed standard (e.g. scientific, historical, technical information, experience).**

Scientific, historical, technical information and experience are all readily available.

**Supporting criteria (Practical)**➤ **Feasibility of adopting the proposed standard within a reasonable time frame.**

- It should be feasible to adopt the proposed standard in a reasonable period of time.

➤ **Stage of development of the proposed standard (is a standard on the same topic already widely used by NPPOs, RPPOs or a relevant international organization).**

- A specification for an almost identical standard has recently been approved by NAPPO and development of the NAPPO standard will begin when resources are available.

➤ **Availability of expertise needed to develop the proposed standard.**

- Experts with experience needed to develop the proposed standard can be found in NAPPO, APPPC, other regional plant protection organizations, and TPF.

**Supporting criteria (Economic)**➤ **Estimated value of the plants protected.**➤ **Estimated value of trade affected by the proposed standard (e.g. volume of trade, value of trade, the percentage of Gross Domestic Product of this trade) if appropriate.**

- This standard could have a tremendous effect on potentially all fruits and vegetables in trade.

➤ **Estimated value of new trade opportunities provided by the approval of the proposed standard.**

- Where commodities may have been denied importation into a country due to old or erroneous information in the literature.

➤ **Potential benefits in terms of pest control or quarantine activities.**

- It will allow for more accurate PRAs.

**Supporting criteria (Environmental)**➤ **Utility to reduce the potential negative environmental consequences of certain phytosanitary measures, for example reduction in global emissions for the protection of the ozone layer.**➤ **Utility in the management of non indigenous species which are pests of plants (such as some invasive alien species).**➤ **Contribution to the protection of the environment, through the protection of wild flora, and their habitats and ecosystems, and of agricultural biodiversity.**

- This standard will contribute to the protection of agricultural systems as well as the environment, the latter because it would help trading partners agree upon the need to regulate pests which could affect wild flora,

habitats and ecosystems.

**Supporting criteria (Strategic)**

- **Extent of support for the proposed standard (e.g. one or more NPPOs or RPPOs have requested it, or one or more RPPOs have adopted a standard on the same topic).**
  - A specification for an almost identical standard has recently been approved by NAPPO and development of the NAPPO standard will begin when resources are available. NAPPO and APPPC have also adopted other standards related to host status determinations which differ from the current proposal in that they are based on research protocols, not on available evidence. An IPPC standard for determination of fruit fly host status is currently under review by the IPPC.
- **Frequency with which the issue addressed by the proposed standard emerges as a source of trade disruption (e.g. disputes or need for repeated bilateral discussions, number of times per year trade is disrupted).**
  - Determination of host status is a frequent source of disagreement and trade disruption between contracting parties. Harmonized criteria for determining host status based on available evidence would expedite agreement on host status and thereby expedite trade. Laboratory studies often not feasible due to time and resource constraints.
- **Relevance and utility to developing countries.**
  - Relevant and useful to both developed and developing countries. Should be of particular benefit to developing countries who may lack funding or trained personnel to undertake laboratory studies to determine host status.
- **Coverage (application to a wide range of countries/pests/commodities).**
  - Wide range of countries/pests/commodities.
- **Complements other standards (e.g. potential for the standard to be used as part of a systems approach for one pest, complement treatments for other pests).**
  - Provides a broad foundation to address host status determinations and complements other ISPMs relating to PRA (ISPM 2 and 11), pest status (ISPM 8) and pest reporting (ISPM 17).
  - **Foundation standards to address fundamental concepts (e.g. treatment efficacy, inspection methodology).**
    - This would be a foundation standard to address fundamental concepts related to host status determination for the broadest range of potential pests, not limited to one type of pest (e.g., fruit flies)
- **Expected standard longevity (e.g. future trade needs, suggested use of easily outdated technology or products).**
  - Unlikely to become outdated because of new technologies.
- **Urgent need for the standard.**
  - Pressing need for standard.

**Diagnostic protocols are subject to additional criteria. For proposals for DPs, please elaborate on the following criteria to help the future consideration of the subject proposed:**

NA

## Draft Specification (No. 2)

**Proposed Title:** Criteria for the determination of host status based on available information

**Reason for the standard** (justification as to why the standard is needed, some of this can be copied from the above submission):

There are no international guidelines for determining host status based on available information (as opposed to research protocols) that apply to all organisms that may be pests. The draft ISPM on host status, which is currently under review, is specific to fruit flies and does not provide detailed guidance on use of available scientific and historical information to make host status determinations.

Well-documented pest biology, consensus in the scientific literature and consensus among NPPOs often results in a clear determination of host status. However, there can be considerable controversy in interpreting information which leads to potential disputes between NPPOs, even for organisms that are well understood. Host status may require regular review for several reasons:

- Errors in the literature or in databases and compendia (e.g. incorrect citations, incorrect interpretations, taxonomic misidentifications).
- Host status of a commodity may be variable depending on host and organism biology/physiology/phenology (e.g. changes in host status depending on season, ripeness or variety).
- Host status is unclear (lack of data in the literature, conflicting information, or only experimental hosts but lacking field data).
- Cases where an organism is associated with a commodity but may not be feeding on that commodity (e.g. contaminating pests;)

Determining the host status of an organism is essential to several key activities undertaken by NPPOs. Determining the status of hosts with respect to organisms is one of the central pieces of information needed to conduct a pest risk analysis (PRA). The determination of host status can have major impacts on phytosanitary measures required for importing and exporting commodities, as well as domestic level decisions and actions (e.g. eradication programs, surveys, etc.).

There are many sources of information that provide lists of hosts for organisms. Some of these sources simply associate the organism with a host(s) in a very general sense while other sources of information provide a detailed description of the relationship of the organism to the host(s). Likewise, information sources may describe different types of hosts, according to the status of that host to the organism. The terminology in the literature and in regulations is not harmonized and can be interpreted in many different ways. The diverse terminology and the diversity of descriptions of host – organism interactions may be extremely difficult to interpret.

While regional standards have been developed by NAPPO and APPPC that address determining host status based on research protocols, there are no consistent criteria for determining host status based on available information (including existing scientific data and NPPO records). The use of inconsistent criteria for listing hosts of organisms has the potential to lead to disputes between NPPOs over whether organisms should be regulated on different hosts. The development of consistent criteria for determining host status will aid NPPOs in performing technically sound, science-based PRAs, and in ensuring that surveillance, inspection and other regulatory programs are appropriately targeted and technically justified.

**Purpose** (explain what issue will be addressed and/or harmonized once this standard is put in place):

The purpose of the standard will be to provide consistent criteria for judging information (e.g. scientific literature, NPPO records, pest reports, etc.) to determine the status of hosts for organisms. These criteria will aid NPPOs in developing host lists used in programmatic activities such as standards development, PRA, surveillance, inspection and development of regulation. The standard will discuss how information can be evaluated for more consistency in decision-making. Suggested terminology that should be used to describe the status of host(s) with respect to organisms, or in defining the host – organism interactions will be provided.

**Scope** (this provides the boundaries or limits to what the standard should cover):

This standard will provide guidelines for applying consistent criteria for interpreting information regarding organism – host interactions when determining host status for organisms.

**Tasks for the expert drafting group** (this will help direct the work of the experts):

Tasks: The panel should develop a standard that describes specific criteria used to evaluate scientific and other information to determine host status for organisms. This should include:

1. Examining existing documentation related to determining host status for organisms (see references)
2. Identifying and describing the different types of organism-host interactions recognized in scientific and regulatory literature and information
3. Identifying terminology used in describing organism-host interactions in scientific and regulatory literature and information (e.g. host, non-host, conditional host, natural host, non-natural host, reproductive host, alternate host, etc.)
4. Identifying the most relevant types of organism-host interactions and the specific conditions that determine host status (e.g. conditions related to conditional hosts, hitchhiker or contaminating pests, non-hosts, natural hosts, etc.) and propose new categories if appropriate.
5. Describing key criteria that can be used to evaluate organism-host interactions (e.g. what specific information / criteria is needed to determine whether a host is truly a host for a organism)
6. Recommending specific criteria and terminology for describing hosts in NAPPO standards, NPPO documents (e.g. PRAs, surveillance protocols, etc.) and regulations.

**Expertise (this will provide the basis for screening nominations):**

Expertise in pest risk analysis; general entomology (especially in taxonomic groups of Lepidoptera and / or Tephritidae / Diptera) and general plant pathology; total of 6 – 8 experts across these focus areas with experience in developing lists of hosts of organisms for various reasons (e.g. PRA, surveillance, inspection, standards development, etc.)

Participants: 1-2 experts from each NAPPO country with required experience to accomplish the tasks.

**References** (Relevant ISPMs and national, regional or international standards on the same topic and any specific references that would be relevant during drafting):

- ISPM 2. 2007. Framework for pest risk analysis. Rome, IPPC, FAO.
- ISPM 8. 1998. Determination of pest status in an area. Rome, IPPC, FAO.
- ISPM 11. 2004. Pest risk analysis for quarantine pests including analysis of environmental risks and living modified organisms. Rome, IPPC, FAO.
- ISPM 17. 2002. Pest Reporting. Rome, IPPC, FAO.
- RSPM 30. 2008. Guidelines for the determination and designation of host status of a fruit or vegetable for fruit flies (Diptera: Tephritidae). Ottawa, NAPPO.

**Literature review** (this section will provide a **summary of the topic** based on scientific and technical publications, including a referenced **listed of literature reviewed**. This will help provide the scientific basis for the content of the standard to be used by the selected experts during the development of the standard):

- Aluja, M., and R. L. Mangan. 2008. Fruit fly (Diptera: Tephritidae) host status determination: critical conceptual, methodological, and regulatory considerations. *Ann. Rev. Entomol.* 53: 473–502.
- Cowley, Baker and Harte. 1992. Definition and determination of host status for multivoltine fruit fly (Diptera: Tephritidae) species. *Journal of Economic Entomology.* 85(2): 312-317.

**Attachment 5: Submission No. 3****Title (type of topic):** ISPM XX:20XX Guidance on pest risk management**Proposed by/ supported by:** USA

| <b>Submission form for IPPC standard setting work programme topics</b>  |   |   |
|---|---|---|
| <b>Proposed by:</b> (Name of IPPC Official Contact Point) <sup>2</sup>  |   |   |
| Mr John Greifer (USA)   |   |   |
| <b>Contact:</b> (Contact information of an individual able to clarify issues relating to this submission)   |   |   |
| Name: Mr John Greifer   |   |   |
| Position and organization: Assistant Deputy Administrator for International Phytosanitary Standards   |   |   |
| Mailing address: 1400 Independence Ave SW, Washington, DC 20250, USA  |   |   |
| Phone: +1 202 799 7159 Fax: +1 202 690 0472   |   |   |
| E-mail: John.K.Greifer@aphis.usda.gov   |   |   |
| <b>Type of topic:</b> (Choose one box only)   |   |   |
| <b>A. New ISPM:</b><br><input checked="" type="checkbox"/> Concept<br><input type="checkbox"/> Pest specific<br><input type="checkbox"/> Commodity specific<br><input type="checkbox"/> Reference   | <b>B. New component to an existing ISPM:</b><br><input type="checkbox"/> Supplement<br><input type="checkbox"/> Annex<br><input type="checkbox"/> Appendix<br><input type="checkbox"/> Technical Panel (technical area)<br><input type="checkbox"/> DP: Diagnostic protocol (subject)<br><input type="checkbox"/> PT: Phytosanitary treatment (topic)<br><input type="checkbox"/> Glossary term (subject) | <b>C. Revision/Amendment of:</b><br><input type="checkbox"/> ISPM<br><input type="checkbox"/> Supplement<br><input type="checkbox"/> Annex<br><input type="checkbox"/> Appendix<br><input type="checkbox"/> Glossary term |
| <b>Proposed title of new ISPM or component: or Title of document to be revised or amended:</b>  |   |   |
| Guidance on pest risk management  |   |   |
| <b>Summary justification for the proposal (two sentences maximum):</b>  |   |   |
| <p>IPPC members have begun developing pest and commodity specific standards and there seems to be a trend to include various elements of pest risk management, but there is no agreed-to guidance on pest risk management. A standard is needed to address these issues.</p> <p>Submissions should address the applicable criteria for justification of the proposal (as listed below). Where possible, information in support of the justification and that may assist in the prioritization should be indicated. <b>All core criteria must be addressed; supporting criteria should be addressed if applicable.</b></p> |   |   |
| <b>Core criteria:</b>   |   |   |
| <b>Contribution to the purpose of the IPPC as described in Article I.1.</b>   |   |   |
| By developing this draft standard, IPPC members will be taking common and effective action to prevent the spread and introduction of pests of plants and plant products, and to promote appropriate measures for their control.   |   |   |
| <b>Feasibility of implementation at the global level (includes ease of implementation, technical complexity, capacity of NPPOs to implement, relevance for more than one region).</b>   |   |   |
| The adoption of an ISPM on pest risk management would enhance the development and implementation of standards internationally, especially among developing countries. A more harmonised, global strategy for the development and implementation standards is achievable and desirable.  |   |   |

<sup>2</sup> Text in brackets () given for explanatory purposes.



**Clear identification of the problems that need to be resolved through the development of the standard.**

As IPPC members begin developing pest and commodity specific standards, there seems to be a trend to include various elements of pest risk management.

Currently there is no agreed-to guidance on pest risk management – when is it necessary, to what extent should it be applied, how do key concepts such as managed risk, technical justification, appropriate level of protection and equivalence, and how can countries look to harmonize further when it comes to managing risk.

We believe that a standard on pest risk management would be timely, especially as IPPC members begin to undertake work on specific pests or commodities. It would be beneficial to have agreement on broad concepts that can be applied in the development of any specific standards in the future.

Without a broader standard on pest risk management in place first, we may see divergence and a lack of harmonization in specific standards that discuss elements of pest risk management for pests or commodities.

**Availability of, or possibility to collect, information in support of the proposed standard (e.g. scientific, historical, technical information, experience).**

Several experts in the subject of risk management are available to develop this standard.

**Supporting criteria (Practical)**

- Feasibility of adopting the proposed standard within a reasonable time frame.
- Stage of development of the proposed standard (is a standard on the same topic already widely used by NPPOs, RPPOs or a relevant international organization).
- Availability of expertise needed to develop the proposed standard.

It is anticipated that this proposed standard would be adopted within a reasonable time frame.

The concept of risk management is widely used and implemented by NPPOs and RPPOs. In addition, several ISPMs include the concept of risk management, including an IPPC definition for it in ISPM 5: Glossary of Phytosanitary terms. However, without a broader standard on pest risk management in place, we may see divergence and a lack of harmonization in specific standards that discuss elements of pest risk management for pests or commodities.

Several experts in the subject of risk management are available to develop this standard.

**Supporting criteria (Economic)**

- Estimated value of the plants protected.
- Estimated value of trade affected by the proposed standard (e.g. volume of trade, value of trade, the percentage of Gross Domestic Product of this trade) if appropriate.
- Estimated value of new trade opportunities provided by the approval of the proposed standard.
- Potential benefits in terms of pest control or quarantine activities.

Having a harmonized standard on risk management will protect an incalculable number of plants. A harmonized standard will positively impact trade by possibly removing existing barriers to trade. Proposing phytosanitary measures may reduce the trade and pathway risks to an acceptable level for the importing country.

**Supporting criteria (Environmental)**

- Utility to reduce the potential negative environmental consequences of certain phytosanitary measures, for example reduction in global emissions for the protection of the ozone layer.
- Utility in the management of non indigenous species which are pests of plants (such as some invasive alien species).
- Contribution to the protection of the environment, through the protection of wild flora, and their habitats and ecosystems, and of agricultural biodiversity.

This standard focuses on managing the risk of introduction of plant pests associated with imported consignments of plants and plant products while acknowledging the risk of introduction associated with other types of pathways (e.g. packing materials, conveyances, travellers and their luggage, and the natural spread of a pest).

**Supporting criteria (Strategic)**

- Extent of support for the proposed standard (e.g. one or more NPPOs or RPPOs have requested it, or one or more RPPOs have adopted a standard on the same topic).
- Frequency with which the issue addressed by the proposed standard emerges as a source of trade disruption (e.g. disputes or need for repeated bilateral discussions, number of times per year trade is disrupted).
- Relevance and utility to developing countries.
- Coverage (application to a wide range of countries/pests/commodities).
- Complements other standards (e.g. potential for the standard to be used as part of a systems approach for one pest, complement treatments for other pests).
- Foundation standards to address fundamental concepts (e.g. treatment efficacy, inspection methodology).
- Expected standard longevity (e.g. future trade needs, suggested use of easily outdated technology or products).
- Urgent need for the standard.

As IPPC members begin developing pest and commodity specific standards, there seems to be a trend to include various elements of pest risk management.

Currently there is no agreed-to guidance on pest risk management – when is it necessary, to what extent should it be applied, how do key concepts such as managed risk, technical justification, appropriate level of protection and equivalence, and how can countries look to harmonize further when it comes to managing risk.

We believe that a standard on pest risk management would be timely, especially as IPPC members begin to undertake work on specific pests or commodities. It would be beneficial to have agreement on broad concepts that can be applied in the development of any specific standards in the future.

Without a broader standard on pest risk management in place first, we may see divergence and a lack of harmonization in specific standards that discuss elements of pest risk management for pests or commodities.

**Diagnostic protocols are subject to additional criteria. For proposals for DPs, please elaborate on the following criteria to help the future consideration of the subject proposed:**

N/A

| <b>Draft Specification (No. 3)</b>   |
|--|
| <b>Proposed Title:</b> Guidance on pest risk management  |
| <p><b>Reason for the standard</b> (justification as to why the standard is needed, some of this can be copied from the above submission):</p> <p>IPPC members have begun developing pest and commodity specific standards and there seems to be a trend to include various elements of pest risk management, but there is no agreed-to guidance on pest risk management. A standard is needed to address these issues. Without a broader standard on pest risk management in place first, we may see divergence and a lack of harmonization in specific standards that discuss elements of pest risk management for pests or commodities.</p>  |
| <p><b>Purpose</b> (explain what issue will be addressed and/or harmonized once this standard is put in place):</p> <p>This standard provides guidance on the process of identifying ways to react to a perceived risk, evaluating the efficacy of these procedures, and recommending the most appropriate options.</p> <p>Because zero-risk is not a reasonable option, the guiding principle for risk management should be to manage risk to achieve the required degree of safety that can be justified and is feasible within the limits of available options and resources. The uncertainty noted in the assessments of economic consequences and probability of introduction should also be considered and included in the selection of a pest management option.</p> <p>As IPPC members begin developing pest and commodity specific standards, there seems to be a trend to include various elements of pest risk management.</p> <p>Currently there is no agreed-to guidance on pest risk management – when is it necessary, to what extent should it be applied, how do key concepts such as managed risk, technical justification, appropriate level of protection and equivalence, and how can countries look to harmonize further when it comes to managing risk.</p> <p>We believe that a standard on pest risk management would be timely, especially as IPPC members begin to undertake work on specific pests or commodities. It would be beneficial to have agreement on broad concepts that can be applied in the development of any specific standards in the future.</p> <p>Without a broader standard on pest risk management in place first, we may see divergence and a lack of harmonization in specific standards that discuss elements of pest risk management for pests or commodities.</p> |
| <p><b>Scope</b> (this provides the boundaries or limits to what the standard should cover):</p> <p>Risk management is the analytical process of identifying, evaluating, and recommending pest risk management options. This standard provides detailed guidance on how to complete the Stage 3 component of pest risk analysis (PRA): ‘pest risk management’ (ISPM 2: 2007). The Standard assists NPPOs in identifying, evaluating and selecting appropriate risk management measures following the completion of the pest risk assessment stage (Stage 2) of a PRA. This standard focuses on managing the risk of introduction of plant pests associated with imported consignments of plants and plant products while acknowledging the risk of introduction associated with other types of pathways (e.g. packing materials, conveyances, travellers and their luggage, and the natural spread of a pest).</p>   |
| <p><b>Tasks for the expert drafting group</b> (this will help direct the work of the experts):</p> <ol style="list-style-type: none"> <li>1. Include information on procedures for risk management, such as: <ol style="list-style-type: none"> <li>a. Basis for Regulating</li> <li>b. Specific Requirements</li> <li>c. Sources of Information</li> <li>d. Identification of measures</li> <li>e. Evaluating Measures</li> <li>f. Selecting Measures</li> <li>g. Documentation</li> <li>h. Monitoring and feedback</li> </ol> </li> <li>2. Consider adding as a supplement to ISPM 11</li> <li>3. Consider modifying economic information in ISPM 11</li> <li>4. Consider environmental and biodiversity concerns</li> <li>5. Consider whether other ISPMs that address risk management should be modified</li> </ol>  |
| <p><b>Expertise</b> (this will provide the basis for screening nominations):</p> <p>A group of 6-8 members with combined experience in PRA and risk management.</p>  |

**References** (Relevant ISPMs and national, regional or international standards on the same topic and any specific references that would be relevant during drafting):

- ISPM 11:2004 PRA for quarantine pests
- ISPM 5: Glossary of phytosanitary terms
- NAPPO RSPM 24:2005 Integrated pest risk management measures for the importation of plants for planting into NAPPO member countries
- NAPPO RSPM 40: Draft. Pest risk management for the entry of commodities.
- ISPM 14:2002 The use of integrated measures in a systems approach for pest risk management

**Literature review** (this section will provide a **summary of the topic** based on scientific and technical publications, including a referenced **listed of literature reviewed**. This will help provide the scientific basis for the content of the standard to be used by the selected experts during the development of the standard):

- ISPM 1. 2006. Phytosanitary principles for the protection of plants and the application of phytosanitary measures in international trade. Rome, IPPC, FAO.
- ISPM 2. 2007. Framework for pest risk analysis. Rome, IPPC, FAO.
- ISPM 3. 2005. Guidelines for the export, shipment, import and release of biological control agents and other beneficial organisms. Rome, IPPC, FAO.
- ISPM 4. 1995. Requirements for the establishment of pest free areas. Rome, IPPC, FAO.
- ISPM 5. (Updated annually). Glossary of Phytosanitary Terms. Rome, IPPC, FAO.
- ISPM 7. 2011. Phytosanitary certification system. Rome, IPPC, FAO.
- ISPM 10. 1999. Requirements for the establishment of pest free places of production and pest free production sites. Rome, IPPC, FAO.
- ISPM 11. 2013. Pest risk analysis for quarantine pests. Rome, IPPC, FAO.
- ISPM 12. 2011. Guidelines for Phytosanitary Certificates. Rome, IPPC, FAO.
- ISPM 13. 2001. Guidelines for the notification of non-compliance and emergency action. Rome, IPPC, FAO.
- ISPM 14. 2002. The use of integrated measures in a systems approach for pest risk management. Rome, IPPC, FAO.
- ISPM 18. 2003. Guidelines for the use of irradiation as a phytosanitary measure. Rome, IPPC, FAO.
- ISPM 20. 2004. Guidelines for a phytosanitary import system. Rome, IPPC, FAO.
- ISPM 21. 2004. Pest risk analysis for regulated non-quarantine pests. Rome, IPPC, FAO.
- ISPM 22. 2005. Requirements for the establishment of areas of low pest prevalence. Rome, IPPC, FAO.
- ISPM 23. 2005. Guidelines for inspection. Rome, IPPC, FAO.
- ISPM 24. 2005. Guidelines for the determination and recognition of equivalence of phytosanitary measures. Rome, IPPC, FAO.
- ISPM 26. 2006. Establishment of pest-free areas for fruit flies (Tephritidae). Rome, IPPC, FAO.
- ISPM 28. 2007. Phytosanitary treatments for regulated pests. Rome, IPPC, FAO.
- ISPM 31. 2008. Methodologies for sampling of consignments. Rome, IPPC, FAO.
- ISPM 36. 2012. Integrated measures for plants for planting. Rome, IPPC, FAO.
- RSPM 2. 2008. Guidelines for pre-clearance programs. Ottawa, NAPPO.
- RSPM 3. 2011. Guidelines for movement of potatoes into a NAPPO member country. Ottawa, NAPPO.
- RSPM 5 (updated annually). NAPPO glossary of phytosanitary terms. Ottawa, NAPPO.
- RSPM 13. 2009. Guidelines to Establish, Maintain and Verify Karnal Bunt Pest Free Areas in North America. Ottawa, NAPPO.
- RSPM 16. 2013. Guidelines for the Importation of Citrus Propagative Material into a NAPPO Member Country. Ottawa, NAPPO.
- RSPM 20. 2003. Guidelines for the Establishment, Maintenance and Verification of Areas of Low Pest Prevalence for Insects. Ottawa, NAPPO.
- RSPM 24. 2005. Integrated Pest Risk Management Measures for the Importation of Plants for Planting into NAPPO Member Countries. Ottawa, NAPPO.
- RSPM 33. 2009. Guidelines for Regulating the Movement of Ships and Cargo from Areas Infested with the Asian Gypsy Moth. Ottawa, NAPPO.

**Attachment 6: Submission No. 4****Title (type of topic):** ISPM XX:20XX Guidelines for the approval of fumigation facilities**Proposed by/ supported by:** Australia

| <b>Submission form for IPPC standard setting work programme topics</b>  |  |  |
|---|--|--|
| <b>Proposed by:</b> (Name of IPPC Official Contact Point) <sup>3</sup><br>Australian Chief Plant Protection Officer   |  |  |
| <b>Contact:</b> (Contact information of an individual able to clarify issues relating to this submission)<br>Name: DAVID COX<br>Position and organization: DIRECTOR, INTERNATIONAL ARRANGEMENTS PROGRAM<br>Mailing address: Department of Agriculture, Fisheries and Forestry, GPO Box 858, Canberra ACT 2601<br>Phone: +61 6272 3934 Fax:<br>E-mail: <a href="mailto:afas@daff.gov.au">afas@daff.gov.au</a>  |  |  |
| <b>Type of topic:</b> (Choose one box only)   |  |  |
| A. New ISPM:<br><input checked="" type="checkbox"/> Concept<br><input type="checkbox"/> Pest specific<br><input type="checkbox"/> Commodity specific<br><input type="checkbox"/> Reference  | B. New component to an existing ISPM:<br><input type="checkbox"/> Supplement<br><input type="checkbox"/> Annex<br><input type="checkbox"/> Appendix<br><input type="checkbox"/> Technical Panel (technical area)<br><input type="checkbox"/> DP: Diagnostic protocol (subject)<br><input type="checkbox"/> PT: Phytosanitary treatment (topic)<br><input type="checkbox"/> Glossary term (subject) | C. Revision/Amendment of:<br><input type="checkbox"/> ISPM<br><input type="checkbox"/> Supplement<br><input type="checkbox"/> Annex<br><input type="checkbox"/> Appendix<br><input type="checkbox"/> Glossary term |
| <b>Proposed title of new ISPM or component:</b> <b>or</b> <b>Title of document to be revised or amended:</b><br>Guidelines for the approval of fumigation facilities  |  |  |
| <b>Summary justification for the proposal (two sentences maximum):</b><br>Fumigation is an important phytosanitary treatment to reduce the risk of introduction and spread of plant pests through international trade. There is a need for guidelines that outline the general principles of fumigation to enable fumigators to carry out effective fumigations and to provide guidance to NPPOs on the regulatory systems necessary to meet importing country requirements.  |  |  |
| Submissions should address the applicable criteria for justification of the proposal (as listed below). Where possible, information in support of the justification and that may assist in the prioritization should be indicated.<br><b>All core criteria must be addressed; supporting criteria should be addressed if applicable.</b>  |  |  |
| <b>Core criteria:</b>   |  |  |
| <b>Contribution to the purpose of the IPPC as described in Article I.1.</b><br>An effective phytosanitary treatment of pests prevents their spread through trade. Fumigation has long been used to treat commodities or articles to ensure that the pests do not survive to spread to importing countries. By providing fumigators with the general principles of fumigation and NPPOs with the necessary details that allows them to assess the effectiveness and capability of fumigators and fumigation facilities, the need for retreatment by importing countries will be lessened. This is especially relevant in light of the IPPC recommendation, <i>Replacement or reduction of the use of methyl bromide as a phytosanitary measure</i> (2008), on reducing the use of methyl bromide as a fumigant and the proposed standard would contribute to this. |  |  |
| <b>Feasibility of implementation at the global level (includes ease of implementation, technical complexity, capacity of NPPOs to implement, relevance for more than one region).</b><br>Providing information on fumigation will assist fumigators and NPPOs to understand the principles of fumigation and properties of fumigants. For fumigators, these guidelines will provide necessary details to enable them to effectively carry out fumigations. For NPPOs, the guidelines will allow them to assess whether the facilities and   |  |  |

<sup>3</sup> Text in brackets () given for explanatory purposes.

fumigation personnel are capable and of achieving all the requirements for the fumigation of commodities and that these are effectively and consistently applied.

It is **not** proposed that the standard include any specific fumigation treatments.

**Clear identification of the problems that need to be resolved through the development of the standard.**

Little guidance is available to assist NPPOs in assessing whether fumigators have carried out fumigations effectively to allow NPPOs of importing countries to have confidence in the fumigation. By providing fumigators with general principles on fumigation their understanding of the fumigation process and general procedures for fumigation will improve, resulting in more consistent and effective fumigations.

**Availability of, or possibility to collect, information in support of the proposed standard (e.g. scientific, historical, technical information, experience).**

**Australian Fumigation Accreditation Scheme** <http://www.daff.gov.au/biosecurity/import/general-info/pre-border/afas> (accessed 16 August 2013)

**ISPM 28.** 2007. *Phytosanitary treatments for regulated pests*. Rome, IPPC, FAO.

Manual of Fumigation for Insect Control, FAO. 1984

**APPPC draft RSPM Approval of fumigation facilities**

**Supporting criteria (Practical)**

- Feasibility of adopting the proposed standard within a reasonable time frame.
- Stage of development of the proposed standard (is a standard on the same topic already widely used by NPPOs, RPPOs or a relevant international organization).
- Availability of expertise needed to develop the proposed standard.

The APPPC will consider for adoption its draft RSPM 'Approval of fumigation facilities' at its September 2013 biennial meeting. This draft RSPM has been based on the Australian Fumigation Accreditation Scheme and the FAO Manual of Fumigation for insect control. It is proposed that the draft RSPM will form the basis of the ISPM and as such would greatly facilitate the development of the ISPM.

A number of regional experts contributed to the development of the draft RSPM. It is expected that other experts from other regions would contribute to proposed standard.

**Supporting criteria (Economic)**

- Estimated value of the plants protected.
- Estimated value of trade affected by the proposed standard (e.g. volume of trade, value of trade, the percentage of Gross Domestic Product of this trade) if appropriate.
- Estimated value of new trade opportunities provided by the approval of the proposed standard.
- Potential benefits in terms of pest control or quarantine activities.

As noted in the FAO Manual, fumigants are a valuable group of pesticides that can kill insects where no other form of control is feasible. To a large extent they are irreplaceable. Excessive use of fumigants or their misuse can cause accidents and produce adverse publicity that may result in even greater restrictions in their use.

Clear guidelines on general principles and procedures for fumigation will allow fumigators to fully understand effective fumigations and will result in better pest control, providing both exporting and importing countries increased assurance of the effectiveness of the treatment.

**Supporting criteria (Environmental)**

- Utility to reduce the potential negative environmental consequences of certain phytosanitary measures, for example reduction in global emissions for the protection of the ozone layer.
- Utility in the management of non indigenous species which are pests of plants (such as some invasive alien species).
- Contribution to the protection of the environment, through the protection of wild flora, and their habitats and ecosystems, and of agricultural biodiversity.

Correct use of fumigants helps reduce their overall use, both by only using sufficient fumigant to reach required levels and by reducing the need for re-treatment on detection of pests. This will be assisted by allowing NPPOs to effectively monitor fumigation facilities. Effective fumigation when using methyl bromide will result in a reduction of amount of methyl bromide used and thus reduce global emissions, in line with Montreal Protocol and the IPPC Recommendation for its use.

The US Environmental Protection Agency recognised the contribution AFAS is making to reducing emissions of ozone depleting substances with the 'Stratospheric Ozone Protection Award' in 2008. At the time AFAS was operational in Indonesia, Malaysia, Thailand and India. AFAS has since expanded to include Vietnam, the

Philippines, Sri Lanka and Papua New Guinea. It is in various stages of implementation in China, Fiji, New Zealand, Peru, Chile and the nine member countries of the International Regional Organisation for Plant and Animal Health (OIRSA) in Central America.

**Supporting criteria (Strategic)**

- Extent of support for the proposed standard (e.g. one or more NPPOs or RPPOs have requested it, or one or more RPPOs have adopted a standard on the same topic).
  - Frequency with which the issue addressed by the proposed standard emerges as a source of trade disruption (e.g. disputes or need for repeated bilateral discussions, number of times per year trade is disrupted).
  - Relevance and utility to developing countries.
  - Coverage (application to a wide range of countries/pests/commodities).
  - Complements other standards (e.g. potential for the standard to be used as part of a systems approach for one pest, complement treatments for other pests).
  - Foundation standards to address fundamental concepts (e.g. treatment efficacy, inspection methodology).
  - Expected standard longevity (e.g. future trade needs, suggested use of easily outdated technology or products).
  - Urgent need for the standard.
- The Technical Panel on Phytosanitary Treatments has proposed concept standards for guidelines for the use of fumigation as a phytosanitary treatment. This proposed standard could form the basis for the proposed Technical Panel standard.
  - Support from Asian and Pacific countries is expected: At its next biennial meeting, in September 2013, the APPPC will consider for adoption its draft RSPM 'Approval of fumigation facilities'.
  - The proposed standard addresses fundamental concepts of treatment efficacy by increasing effectiveness of fumigations which are used by NPPOs for a range of pests and commodities
  - Fumigation will continue to be accepted treatment of commodities and regulated articles and as such a concept standard that outlines the principles for fumigation will continue to be of relevance.

**Diagnostic protocols are subject to additional criteria. For proposals for DPs, please elaborate on the following criteria to help the future consideration of the subject proposed:**

- Need for international harmonization of the diagnostic techniques for the pest (e.g. due to difficulties in diagnosis or disputes on methodology).
- Relevance of the diagnosis to the protection of plants including measures to limit the impact of the pest.
- Importance of the plants protected on the global level (e.g. relevant to many countries or of major importance to a few countries).
- Volume/importance of trade of the commodity that is subjected to the diagnostic procedures (e.g. relevant to many countries or of major importance to a few countries).
- Other criteria for topics as determined by CPM that are relevant to determining priorities.
- Balance between pests of importance in different climatic zones (temperate, tropics etc) and commodity classes.
- Number of labs undertaking the diagnosis.
- Feasibility of production of a protocol, including availability of knowledge and expertise.

Not applicable

| <b>Draft Specification (No. 4)</b>   |
|--|
| <p><b>Proposed Title:</b><br/>Guidelines for the approval of fumigation facilities</p>   |
| <p><b>Reason for the standard</b> (justification as to why the standard is needed, some of this can be copied from the above submission):<br/>Fumigation is a useful measure to reduce the risk of introduction and spread of regulated pests through the international movement of commodities or regulated articles. However, little guidance has been available to assist NPPOs in assessing whether fumigators have carried out fumigations effectively which would allow NPPOs of exporting and importing countries to have confidence in the efficacy of the fumigation.</p>   |
| <p><b>Purpose</b> (explain what issue will be addressed and/or harmonized once this standard is put in place):<br/>The proposed standard would provide guidance to assist NPPOs to assess whether fumigators can undertake fumigations effectively and can provide an approved service. To support this, principles and procedures for fumigation would also be covered which would provide fumigators with the knowledge of what is expected in a fumigation.</p>   |
| <p><b>Scope</b> (this provides the boundaries or limits to what the standard should cover):<br/>The proposed standard would outline the general principles of fumigation and categories of fumigation techniques for phytosanitary purposes. It would describe the roles and procedures that need to be in place for effective fumigation and provide guidance to the NPPO on the regulatory systems necessary to meet importing country requirements. The proposed guidelines would assist fumigators to carry out effective fumigations reliably and NPPOs with guidance on developing appropriate systems for regulating and certifying fumigations to meet importing country requirements.<br/>Requirements to be covered should include the regulation of fumigation treatment providers, including approval of fumigation treatment providers; competency of fumigators; compliance surveillance; and processes for the withdrawal or suspension of fumigation provider approval. The roles and responsibilities of the NPPO and approved fumigation treatment providers should also be included.<br/>It will not cover use of specific fumigants.</p> |
| <p><b>Tasks for the expert drafting group</b> (this will help direct the work of the experts):<br/>Describe</p> <ul style="list-style-type: none"> <li>• The regulation of fumigation treatment providers, including approval of fumigation treatment providers, approval assessment and documentation</li> <li>• Competency of fumigators</li> <li>• Compliance surveillance and actions when non compliance</li> <li>• Roles and responsibilities of NPPOs and approved fumigation treatment providers</li> <li>• Principles of fumigation, including fumigants, their suitability, properties, concentration levels, safety</li> <li>• General techniques for fumigation, including site selection, consignment suitability for fumigation, penetration of fumigant, fumigation enclosures, calculation of dosage, distribution of fumigant, releasing the dose into the fumigation enclosure, leakage detection, monitoring concentration, topping up of fumigant, ventilation, documentation</li> </ul>   |
| <p><b>Expertise</b> (this will provide the basis for screening nominations):</p> <ul style="list-style-type: none"> <li>• Use of fumigation as a phytosanitary treatment</li> <li>• Experience in audit and accreditation of fumigation facilities</li> </ul>  |
| <p><b>References</b> (Relevant ISPMs and national, regional or international standards on the same topic and any specific references that would be relevant during drafting):<br/><br/> <b>Australian Fumigation Accreditation Scheme</b> <a href="http://www.daff.gov.au/biosecurity/import/general-info/pre-border/afas">http://www.daff.gov.au/biosecurity/import/general-info/pre-border/afas</a> (accessed 16 August 2013)<br/> <b>ISPM 28</b>. 2007. <i>Phytosanitary treatments for regulated pests</i>. Rome, IPPC, FAO.<br/> <i>Manual of Fumigation for Insect Control</i>, FAO. 1984<br/> Draft APPPC RSPM Approval of fumigation facilities</p>  |



**Literature review** (this section will provide a **summary of the topic** based on scientific and technical publications, including a referenced **listed of literature reviewed**. This will help provide the scientific basis for the content of the standard to be used by the selected experts during the development of the standard):

**ISPM 28** outlines the requirements for phytosanitary treatments including efficacy data under laboratory/controlled and under controlled conditions and the feasibility and applicability of phytosanitary treatments.

**Australian Fumigation Accreditation Scheme (AFAS)** <http://www.daff.gov.au/biosecurity/import/general-info/pre-border/afas> (accessed 16 August 2013). AFAS is a management system run by participating overseas government agencies to ensure continued compliance of fumigators with the requirements of the Australian Government Department of Agriculture, Fisheries and Forestry (DAFF) Methyl Bromide Fumigation Standard. It provides a training and accreditation system for fumigators and regulatory officers, a registration system for fumigation companies and acceptance by Australia of fumigation certificates issued under the scheme. The objectives of AFAS are to provide capacity building assistance to overseas regulatory officers, in respect to registering, monitoring and auditing fumigation companies; improve the technical expertise of overseas fumigators and regulatory officers by providing world's best practice methyl bromide fumigation training; and assist fumigators to maintain a high standard of fumigation performance and compliance with DAFF Biosecurity requirements.

The 1984 FAO **Manual of fumigation for insect control** discusses the use of fumigation in pest management program as insecticides and extends to control of bird and mammalian pests when discussing specific fumigants. It does not cover soil fumigants so does not consider the effect of fumigants on nematodes. It outlines principles of fumigation, including choice of fumigant and properties associated with fumigants such as evaporation, diffusion and penetration,

It discusses safety precautions and protective devices, the field determination of fumigants and fumigant residues. It covers different types of fumigants and the application of fumigants at atmospheric pressure and under vacuum. It discusses specific types of fumigations such as under controlled atmospheres, plant quarantine and experimental fumigations. It includes a chapter on the fumigation of bulk grain. It provides schedules for fumigation, including a number of different methyl bromide fumigation treatments, for seeds, bulk grain, flower bulbs and corms.

The **APPPC draft RSPM** outlines the general principles of fumigation and categories of fumigation techniques for phytosanitary purposes. It describes the roles and procedures that need to be in place for effective fumigation and provide guidance to the NPPO on the regulatory systems necessary to meet importing country requirements. The guidelines are to assist fumigators to carry out effective fumigations reliably and NPPOs with guidance on developing appropriate systems for regulating and certifying fumigations to meet importing country requirements. It does not include treatment schedules for specific fumigants.

Other fumigation literature can be specific to the commodity or type of fumigation, for example, the **FAO Guide to fumigation under gas-proof sheets** (2004) was produced by Australian Centre for International Agricultural Research for the FAO. It shows how to do fumigations practically with methyl bromide and phosphine using gas-proof sheets to fumigate bag-stacks of grain and other commodities, loaded freight containers and other products and cargoes such as timber and machinery. It outlines the best fumigation practice for using temporary fumigation enclosures of gas-proof sheets. As such it is more specific than either the AFAS scheme, the FAO manual or the draft RSPM. It includes a glossary of fumigation terms. It discusses who is responsible for fumigations, best fumigation practice, monitoring, choosing the best fumigant (methyl bromide or phosphine), sheet fumigation, aeration and clearance after a fumigation and fumigation failure.

**Attachment 7: Submission No. 5****Title (type of topic):** ISPM XX:20XX Guidelines for the approval of irradiation facilities**Proposed by/ supported by:** Australia

| <b>Submission form for IPPC standard setting work programme topics</b>  |  |  |
|---|--|--|
| <b>Proposed by:</b> Australian Chief Plant Protection Officer   |  |  |
| <b>Contact:</b> (Contact information of an individual able to clarify issues relating to this submission)<br>Name: Peter Leach<br>Position and organization: Senior Entomologist, Queensland Department of Agriculture, Fisheries and Forestry .....<br>Mailing address: GPO Box 46, BRISBANE QLD 4001<br>Phone :+61 7 4057 3679 Fax :.....<br>E-mail : <a href="mailto:peter.leach@daff.qld.gov.au">peter.leach@daff.qld.gov.au</a>  |  |  |
| <b>Type of topic:</b> (Choose one box only)   |  |  |
| C. New ISPM:<br><input checked="" type="checkbox"/> Concept<br><input type="checkbox"/> Pest specific<br><input type="checkbox"/> Commodity specific<br><input type="checkbox"/> Reference  | B. New component to an existing ISPM:<br><input type="checkbox"/> Supplement<br><input type="checkbox"/> Annex<br><input type="checkbox"/> Appendix<br><input type="checkbox"/> Technical Panel (technical area)<br><input type="checkbox"/> DP: Diagnostic protocol (subject)<br><input type="checkbox"/> PT: Phytosanitary treatment (topic)<br><input type="checkbox"/> Glossary term (subject) | C. Revision/Amendment of:<br><input type="checkbox"/> ISPM<br><input type="checkbox"/> Supplement<br><input type="checkbox"/> Annex<br><input type="checkbox"/> Appendix<br><input type="checkbox"/> Glossary term |
| <b>Proposed title of new ISPM or component:</b> <span style="margin-left: 100px;"><b>or</b></span> <b>Title of document to be revised or amended:</b>   |  |  |
| Guidelines for the approval of irradiation facilities   |  |  |
| <b>Summary justification for the proposal (two sentences maximum):</b><br>With the adoption of irradiation phytosanitary treatments by the IPPC, there is a need for a common framework to enable NPPOs to approve irradiation facilities used for phytosanitary purposes, to allow them to assess the effectiveness and ability of a facility to meet all the requirements for the irradiation of commodities. By providing detailed information to support the information that is briefly outlined in the check list for facility approval in Annex 2 of ISPM 18, the proposed standard would complement ISPM 18 and assist in its implementation.   |  |  |
| Submissions should address the applicable criteria for justification of the proposal (as listed below). Where possible, information in support of the justification and that may assist in the prioritization should be indicated.<br><b>All core criteria must be addressed; supporting criteria should be addressed if applicable.</b>  |  |  |
| <b>Core criteria:</b>   |  |  |
| <b>Contribution to the purpose of the IPPC as described in Article I.1.</b><br>An effective phytosanitary treatment of pests prevents their spread through trade. Although relatively new, irradiation treatments have to be successfully and safely applied to the commodities or articles to ensure that the pests do not survive the treatment. By providing NPPOs with the necessary details that allows them to assess the effectiveness and ability of an irradiation facility ensure that the facilities have the ability to fulfil the necessary requirements to successfully carry out the treatment. This is especially important as inspection is an impractical means to evaluate if the treatment is effective as live insects may be detected. The proposed standard will allow NPPOs to ensure that any commodities or articles that undergo irradiation treatment do not contribute to the spread or establishment of pests in countries where they do not occur. |  |  |
| <b>Feasibility of implementation at the global level (includes ease of implementation, technical complexity, capacity of NPPOs to implement, relevance for more than one region).</b><br>For those NPPOs that use irradiation facilities, these guidelines will provide necessary details to enable them to assess whether the facilities are effective in delivering all the requirements for the irradiation of commodities. For NPPOs that are establishing or thinking of establishing such facilities, the detailed guidelines will assist them in determining what issues need to be addressed and then allow them to appropriately determine if such facilities can be approved.   |  |  |

**Clear identification of the problems that need to be resolved through the development of the standard.**

Annex 2 of ISPM 18 provides a check list for facility approval, but does not provide any details. This lack of detail means there is no consistency in how NPPOs approve irradiation facilities. Different standards of approval can mean that some irradiation treatments are not effective and the commodities could therefore contribute to the spread of pests. Importing NPPOs may then require that they audit such facilities to ensure the effectiveness of the facility in carrying out the treatments. This imposes additional burdens on both the exporting and importing NPPOs as well as increasing costs. A harmonised process would reduce costs and burdens for both importing and exporting NPPOs.

**Availability of, or possibility to collect, information in support of the proposed standard (e.g. scientific, historical, technical information, experience).**

- *Draft Guidelines for the Audit and Accreditation of Irradiation Facilities used for Sanitary and Phytosanitary Treatment of Food and Agricultural Products*, developed in an International Atomic Energy Agency funded project (RAS05/050), Working Material, IAEA Vienna, 2010
- *Draft RSPM, Approval of irradiation facilities*, APPPC 2013
- ISO standards
- ASTM standards

**Supporting criteria (Practical)**

- Feasibility of adopting the proposed standard within a reasonable time frame.
- Stage of development of the proposed standard (is a standard on the same topic already widely used by NPPOs, RPPOs or a relevant international organization).
- Availability of expertise needed to develop the proposed standard.

The APPPC will consider for adoption its draft RSPM 'Approval of irradiation facilities' at its September 2013 biennial meeting. This draft RSPM has been based on the ASEAN/IAEA guidelines developed in 2010. It is proposed that the draft RSPM will form the basis of the ISPM and as such would greatly facilitate the development of the ISPM.

A number of experts were involved in the development of the IAEA guidelines and further experts contributed to the development of the draft RSPM. It is expected that other experts from other regions would contribute to proposed standard.

**Supporting criteria (Economic)**

- Estimated value of the plants protected.
- Estimated value of trade affected by the proposed standard (e.g. volume of trade, value of trade, the percentage of Gross Domestic Product of this trade) if appropriate.
- Estimated value of new trade opportunities provided by the approval of the proposed standard.
- Potential benefits in terms of pest control or quarantine activities.

There is increasing trade in commodities that have been treated by irradiation, as evidenced by the importance placed by the IPPC on developing phytosanitary treatments for irradiation – currently ten adopted and more under development.

Use of irradiation as a phytosanitary treatment is expected to increase, especially with the loss of some other treatments, such as pesticides.

**Supporting criteria (Environmental)**

- Utility to reduce the potential negative environmental consequences of certain phytosanitary measures, for example reduction in global emissions for the protection of the ozone layer.
- Utility in the management of non indigenous species which are pests of plants (such as some invasive alien species).
- Contribution to the protection of the environment, through the protection of wild flora, and their habitats and ecosystems, and of agricultural biodiversity.

Irradiation is an alternative phytosanitary treatment to some chemical and other treatments that can potentially impact on the environment.

**Supporting criteria (Strategic)**

- Extent of support for the proposed standard (e.g. one or more NPPOs or RPPOs have requested it, or one or more RPPOs have adopted a standard on the same topic).
  - Frequency with which the issue addressed by the proposed standard emerges as a source of trade disruption (e.g. disputes or need for repeated bilateral discussions, number of times per year trade is disrupted).
  - Relevance and utility to developing countries.
  - Coverage (application to a wide range of countries/pests/commodities).
  - Complements other standards (e.g. potential for the standard to be used as part of a systems approach for one pest, complement treatments for other pests).
  - Foundation standards to address fundamental concepts (e.g. treatment efficacy, inspection methodology).
  - Expected standard longevity (e.g. future trade needs, suggested use of easily outdated technology or products).
  - Urgent need for the standard.
- Support from IAEA for the adoption of an international standard on approval of irradiation facilities for phytosanitary treatments. It strongly encouraged the development of the regional standard and would therefore be expected to support an international standard
  - Support from Asian and Pacific countries is expected. At its next biennial meeting, in September 2013, the APPPC will consider for adoption its draft RSPM 'Approval of irradiation facilities' which was developed from the IAEA guidelines.
  - As developing countries increasingly move to use irradiation facilities for phytosanitary treatments, the proposed standard will provide the detailed framework for approving irradiation facilities and give them confidence that they have sufficient knowledge to understand and approve such premises.
  - The IPPC obviously places value on the use of irradiation with the adoption of ISPMs 18 and 28 on irradiation phytosanitary treatments, with others under development. The proposed standard complements ISPM 18.
  - It is a foundation standard that supports the Technical Panel on Phytosanitary Treatments proposal for basic concept standards on phytosanitary treatments.
  - The proposed ISPM does not cover specific treatments, but covers the fundamentals for approval of facilities, dosimetry, quality management and post-treatment security. It would provide NPPOs with sufficient knowledge to review irradiation facilities to ensure that they can treat commodities to meet phytosanitary requirements.
  - Increasing use of irradiation as a phytosanitary treatment means that there is a need for a standard to provide NPPOs, who may not have experience in this treatment, with clear guidelines as to what should be considered in approving irradiation facilities. Unless there are detailed approval guidelines, there is no guarantee that the treatments are effective and ineffective treatments may contribute to the spread of pests.

**Diagnostic protocols are subject to additional criteria. For proposals for DPs, please elaborate on the following criteria to help the future consideration of the subject proposed:**

N/A

| <b>Draft Specification (No. 5)</b>   |
|--|
| <b>Proposed Title:</b><br>GUIDELINES FOR THE APPROVAL OF IRRADIATION FACILITIES  |
| <b>Reason for the standard</b> (justification as to why the standard is needed, some of this can be copied from the above submission):<br><br>With the adoption of irradiation phytosanitary treatments by the IPPC, there is a need for a common framework to enable NPPOs to approve irradiation facilities used for phytosanitary purposes, to allow them to assess the effectiveness and ability of a facility to fulfil all the requirements for the irradiation of commodities. The proposed standard would complement ISPM 18, detailed the information that is briefly outlined in the check list for facility approval in Annex 2.  |
| <b>Purpose</b> (explain what issue will be addressed and/or harmonized once this standard is put in place):<br><br>The standard would provide the elements of a quality management system that would provide the minimum necessary for the operation of an irradiation facility using either radionuclides or machine generated sources.   |
| <b>Scope</b> (this provides the boundaries or limits to what the standard should cover):<br><br>The standard would provide guidelines to NPPOs for approval, either by certification or accreditation, of facilities irradiating commodities for phytosanitary purposes consistent with ISPM No.18 <i>Guidelines for the use of irradiation as a phytosanitary measure</i> and ISPM No.28 <i>Phytosanitary treatments for regulated pests</i> .<br><br>It would not cover specific treatments.   |
| <b>Tasks for the expert drafting group</b> (this will help direct the work of the experts):<br><br><ul style="list-style-type: none"> <li>• Describe requirements for irradiation facility accreditation, including <ul style="list-style-type: none"> <li>○ facility design</li> <li>○ radiation sources</li> <li>○ equipment</li> <li>○ validation</li> <li>○ process specifications</li> <li>○ routine monitoring and control</li> <li>○ record keeping</li> </ul> </li> <li>• Describe quality management, including <ul style="list-style-type: none"> <li>○ Responsibility</li> <li>○ management commitment</li> <li>○ monitoring etc</li> <li>○ equipment calibration</li> <li>○ product release</li> <li>○ documentation</li> <li>○ record management</li> </ul> </li> </ul>                   |
| <b>Expertise</b> (this will provide the basis for screening nominations):<br><br><ul style="list-style-type: none"> <li>• Use of irradiation as a phytosanitary treatment</li> <li>• Experience in audit and accreditation of irradiation facilities</li> </ul>  |
| <b>References</b> (Relevant ISPMs and national, regional or international standards on the same topic and any specific references that would be relevant during drafting):<br><br>IAEA 2010 Draft Guidelines for the audit and accreditation of irradiation facilities used for sanitary and phytosanitary treatment of food and agricultural products.,<br>ASTM E2303. 2003. <i>Standard guide for absorbed-dose mapping in radiation processing facilities</i> .<br>ASTM F1355-06. <i>Standard guide for irradiation of fresh agricultural produce as a phytosanitary treatment</i> .<br>ISO 9000, 2005, <i>Quality management systems – Fundamentals and vocabulary</i> .<br>ISO 14470. 2011. <i>Requirements for the development, validation and routine control of the process of irradiation</i> |

*using ionising radiation for the treatment of food.*

ISO 11137-1, 2006. *Sterilization of health care products. Radiation. Part 1 - Requirements for development, validation and routine control of a sterilization process for medical devices.*

ISO/ASTM 51261. 2002. *Guide for selection and calibration of dosimetry systems for radiation processing.*

ISO/ASTM 51275. 2004. *Practice for use of a radiochromic film dosimetry system.*

ISO/ASTM 51276. 2002. *Practice for use of a polymethylmethacrylate dosimetry system.*

ISO/ASTM 51431. 2005. *Practice for dosimetry in electron beam and x-ray (bremsstrahlung) irradiation facilities for food processing.*

ISO/ASTM 51538. 2002. *Practice for use of the ethanol-chlorobenzene dosimetry system.*

ISO/ASTM 51539. 2005. *Guide for use of radiation-sensitive indicators.*

ISO/ASTM 51607. 2004. *Practice for use of the alanine-EPR dosimetry system.*

ISO/ASTM 51608. 2005. *Practice for dosimetry in an x-ray (bremsstrahlung) facility for radiation processing.*

ISO/ASTM 51631. 2003. *Practice for use of calorimetric dosimetry systems for electron beam dose measurements and dosimeter calibrations.*

ISO/ASTM 51649. 2005. *Practice for dosimetry in an electron beam facility for radiation processing at energies between 300keV and 25MeV.*

ISO/ASTM 51702. 2004. *Practice for dosimetry in gamma irradiation facilities for radiation processing.*

ISO/ASTM 51707. 2005. *Guide for estimating uncertainties in dosimetry for radiation processing.*

ISO/IEC. 1991. *ISO/IEC Guide 2:1991, General terms and their definitions concerning standardization and related activities.* Geneva, International Organization for Standardization, International Electrotechnical Commission.

ISPM 5. *Glossary of phytosanitary terms.* Rome, IPPC, FAO.

ISPM 15. 2009. *Regulation of wood packaging material in international trade.* Rome, IPPC, FAO.

ISPM 18. 2003. *Guidelines for the use of irradiation as a phytosanitary measure.* Rome, IPPC, FAO.

ISPM 28. 2007. *Phytosanitary treatments for regulated pests.* Rome, IPPC, FAO

**Literature review** (this section will provide a **summary of the topic** based on scientific and technical publications, including a referenced **listed of literature reviewed**. This will help provide the scientific basis for the content of the standard to be used by the selected experts during the development of the standard):

**ISPM 18** provides technical guidance on the specific procedures for the application of ionizing radiation as a phytosanitary treatment for regulated pests or articles. This does not include treatments used for the production of sterile organisms for pest control; sanitary treatments (food safety and animal health); the preservation or improvement of commodity quality (e.g. shelf life extension); or inducing mutagenesis. ANNEX 2 of the standard provides a checklist for facility approval, covering facilities, personnel, product handling, storage and segregation, irradiation treatment, packaging and labelling, and documentation, but does not provide details on these. It does not include details on specific treatments.

**ISPM 28** outlines the requirements for phytosanitary treatments including efficacy data under laboratory/controlled and under controlled conditions and the feasibility and applicability of phytosanitary treatments.

The **Guidelines for the Audit and Accreditation of Irradiation Facilities used for Sanitary and Phytosanitary Treatment of Food and Agricultural Products** were developed in an International Atomic Energy Agency funded project (RAS05/050). A number of meetings were held in 2010 under the auspices of the IAEA, in Austria, Indonesia and the Republic of Korea, resulting in the finalisation of draft guidelines. The guidelines were developed for use by the APPPC member countries. The Guidelines led to the development of the draft RSPM that will be considered for adoption by the APPPC at its 2013 biennial meeting.

The **APPCC draft RSPM** provides guidelines on the requirements for irradiation facility accreditation, discusses routine dosimetry, dosimeter location and placement frequency. It describes a quality management system: outlining general responsibilities; management commitment; monitoring, measurement and analysis; equipment calibration; product release from irradiation process; documentation and record management. It discusses packaging and labelling. An audit questionnaire to assist with gathering information prior to, or during, an audit for a food irradiation facility is provided as an appendix. As another appendix, it includes the checklist given in Annex 2 of ISPM 18.

The draft notes that NPPO approval for such facilities is required in addition to those of nuclear agencies and food safety authorities. The draft RSPM provides NPPOs with the information so that they will be able to conduct site assessments to:

- assess whether facilities provide segregated storage for irradiation and non-irradiated commodities
- determine availability of additional specifications for gamma irradiation and for electron beam and x-ray irradiation
- verify the specification of the irradiation and its mode of generation
- determine that validation exercises to show the facility is operating to design specification are undertaken
- determine that performance qualification is carried out to show the facility consistently performs to predetermined criteria
- ascertain availability of process specification documents, including information from validation studies, for each commodity
- ensure procedures for product handling and monitoring product integrity are specified
- ensure that the product loading configuration shown in the process specification is used
- ensure that there is a process inventory control
- ensure that personnel are adequately trained
- ensure that equipment is subject to a maintenance plan and records are reviewed by a designated person.

The draft RSPM outlines the need to ensure that dosimetry is performed to ensure that specified doses are received by the commodities being treated. It outlines the need for dose mapping to be undertaken to determine dose distribution and variability, using dosimetry and also identifies the need for dosimeter location and placement frequency to be sufficient and verify the process is under control.

Quality management responsibilities are outlined to ensure that there is a defined quality management system, methods for measurement and analysis, equipment calibration, procedures for commodity release, documentation and irradiation certificate and phytosanitary certificate provision.

Both the ASEAN and the draft RSPM use the ISO and ASTM standards as fundamental to their content but highlight the issues relevant to phytosanitary treatments.

**ISO** and **ASTM** standards provide specifics on a range of issues relating to irradiation including quality management systems and dosimetry.





It is expected that capacity building will be required with respect to audit principles and audit delivery in order to have full implementation at the global level. NAPPO has been working towards harmonization of audit training in the region and this work could support implementation at the global level.

It is important to note that because phytosanitary certificates are issued by authorized public officers only (CPM-4, 2009), this topic proposal does not include phytosanitary certificates.

**Clear identification of the problems that need to be resolved through the development of the standard.**

It is important to have a common approach to authorization to ensure contracting parties maintain confidence in each other's phytosanitary systems.

**Availability of, or possibility to collect, information in support of the proposed standard (e.g. scientific, historical, technical information, experience).**

The North American Plant Protection Organization (NAPPO) has adopted RSPM 28 *Authorization of Entities to Perform Phytosanitary Services*, which should prove helpful to refer to when developing an international standard.

**Supporting criteria (Practical)**

- Feasibility of adopting the proposed standard within a reasonable time frame.
- Stage of development of the proposed standard (is a standard on the same topic already widely used by NPPOs, RPPOs or a relevant international organization).
- Availability of expertise needed to develop the proposed standard.

A draft specification has already been developed and consulted upon, but due to competing priorities the topic was removed from the IPPC list of topics. Since this is not a completely new topic for the IPPC and its contracting parties, this should facilitate development and implementation of the standard within a reasonable time frame.

NAPPO has adopted RSPM 28 *Authorization of Entities to Perform Phytosanitary Services*, which should prove helpful in developing an international standard.

Many countries are implementing or have implemented programs whereby other entities perform phytosanitary activities on their behalf. The individuals involved in these programs would make up the expertise required to develop the standard.

**Supporting criteria (Economic)**

- Estimated value of the plants protected.
- Estimated value of trade affected by the proposed standard (e.g. volume of trade, value of trade, the percentage of Gross Domestic Product of this trade) if appropriate.
- Estimated value of new trade opportunities provided by the approval of the proposed standard.
- Potential benefits in terms of pest control or quarantine activities.

Due in part to resource constraints, contracting parties are increasingly using non-NPPO entities to perform phytosanitary actions on behalf of the NPPO. It is important that the authorization of these entities is harmonized internationally.

**Supporting criteria (Environmental)**

- Utility to reduce the potential negative environmental consequences of certain phytosanitary measures, for example reduction in global emissions for the protection of the ozone layer.
- Utility in the management of non indigenous species which are pests of plants (such as some invasive alien species).
- Contribution to the protection of the environment, through the protection of wild flora, and their habitats and ecosystems, and of agricultural biodiversity.

**Supporting criteria (Strategic)**

- Extent of support for the proposed standard (e.g. one or more NPPOs or RPPOs have requested it, or one or more RPPOs have adopted a standard on the same topic).
- Frequency with which the issue addressed by the proposed standard emerges as a source of trade disruption (e.g. disputes or need for repeated bilateral discussions, number of times per year trade is disrupted).
- Relevance and utility to developing countries.
- Coverage (application to a wide range of countries/pests/commodities).
- Complements other standards (e.g. potential for the standard to be used as part of a systems approach for one pest, complement treatments for other pests).
- Foundation standards to address fundamental concepts (e.g. treatment efficacy, inspection methodology).
- Expected standard longevity (e.g. future trade needs, suggested use of easily outdated technology or products).
- Urgent need for the standard.

NAPPO has adopted RSPM 28 *Authorization of Entities to Perform Phytosanitary Services*.

Authorization of entities to perform phytosanitary actions is becoming increasingly more common in various regions of the world and an ISPM on this subject would provide the necessary guidance to NPPOs when they authorize entities to perform certain phytosanitary activities on their behalf.

**Diagnostic protocols are subject to additional criteria. For proposals for DPs, please elaborate on the following criteria to help the future consideration of the subject proposed:**

- Need for international harmonization of the diagnostic techniques for the pest (e.g. due to difficulties in diagnosis or disputes on methodology).
- Relevance of the diagnosis to the protection of plants including measures to limit the impact of the pest.
- Importance of the plants protected on the global level (e.g. relevant to many countries or of major importance to a few countries).
- Volume/importance of trade of the commodity that is subjected to the diagnostic procedures (e.g. relevant to many countries or of major importance to a few countries).
- Other criteria for topics as determined by CPM that are relevant to determining priorities.
- Balance between pests of importance in different climatic zones (temperate, tropics etc) and commodity classes.
- Number of labs undertaking the diagnosis.
- Feasibility of production of a protocol, including availability of knowledge and expertise.

N/A

| <b>Draft Specification (No. 6)</b>   |
|--|
| <p><b>Proposed Title:</b><br/><i>Authorization of non-NPPO entities to perform phytosanitary actions</i></p>   |
| <p><b>Reason for the standard</b> (justification as to why the standard is needed, some of this can be copied from the above submission):</p> <p><i>Please refer and use wording in the draft spec that went for country consultation</i></p> <p>Authorization is referred to in the IPPC in Article V.2(a), as well as in several standards such as <u>ISPM 3:2005 (Guidelines for the export, shipment, import and release of biological control agents and other beneficial organisms)</u>, <u>ISPM 7:2011 (Phytosanitary certification system)</u>, <u>ISPM 12:2011 (Phytosanitary certificates)</u>, <u>ISPM 20:2004 (Guidelines for a phytosanitary import regulatory system)</u> and <u>ISPM 23:2005 (Guidelines for inspection)</u>. However, there is no standard addressing this concept specifically that would provide guidance to NPPOs when authorizing entities to perform phytosanitary actions on their behalf. Authorization of entities is becoming increasingly common in various regions of the world and an ISPM on this subject would provide the necessary guidance to national plant protection organizations (NPPOs) when they authorize entities to perform certain phytosanitary actions on their behalf.</p>  |
| <p><b>Purpose</b> (explain what issue will be addressed and/or harmonized once this standard is put in place):</p> <p>This standard will describe the essential elements required for the authorization of entities, including individuals, facilities, laboratories, businesses and other organizations, to perform specific phytosanitary actions on behalf of and under the supervision of the NPPO. It will provide guidance to NPPOs on their responsibilities in terms of developing criteria for authorization, assessing compliance, and granting, removal and reinstatement of authorization. In addition, the ISPM should define the responsibilities of the entity to be authorized</p> <p>This standard may be applied to private and government entities.</p>   |
| <p><b>Scope</b> (this provides the boundaries or limits to what the standard should cover):</p> <p>Because phytosanitary certificates are issued by authorized public officers only (CPM-4, 2009), the proposed standard will not include phytosanitary certificates.</p>  |
| <p><b>Tasks for the expert drafting group</b> (this will help direct the work of the experts):</p> <p>The expert working group (EWG) should:</p> <ol style="list-style-type: none"> <li>(1) consider guidelines for authorization developed and currently used by NPPOs and regional plant protection organizations (RPPOs) for employees within the NPPO and for entities, as well as guidelines developed for similar purposes by national accreditation bodies;</li> <li>(2) consider the use of “authorize” and similar terms (e.g. accredit, approve, certify) in adopted ISPMs and how these relate to procedures and requirements outlined in this new standard, and provide recommendations to the Standards Committee on that matter, with respect to ISPM No. 5 (<i>Glossary of phytosanitary terms</i>);</li> <li>(3) discuss and determine the specific phytosanitary actions that may be performed by authorized entities (e.g. testing, inspection, treatment) and the specific phytosanitary actions that should be excluded;</li> <li>(4) define entities and determine the different categories of entities (e.g. individuals, facilities, businesses, organizations) that may or may not be authorized and the phytosanitary actions they each may perform on behalf of the NPPO;</li> <li>(5) discuss and determine the essential elements/criteria required for the authorization of such entities;</li> <li>(6) prepare guidance on the responsibilities of the NPPO when authorizing entities;</li> <li>(7) prepare guidance on the responsibilities of the entities being authorized;</li> <li>(8) prepare guidance on the minimum requirements to be met when authorizing an entity to conduct specific actions on behalf of an NPPO;</li> <li>(9) describe the specific requirements, criteria and processes to be implemented for the authorization of entities including granting the authorization, assessment/audit of compliance, suspension, removal and reinstatement of authorization;</li> <li>(10) determine and describe the minimum requirements for auditors involved in the delivery of audits at authorized</li> </ol> |

|  |
|--|
| <p>entities. Define who the auditors are and their responsibilities;</p> <p>(11) describe what training entities would need to get authorized/accredited to perform phytosanitary actions;</p> <p>(12) consider whether the new standard could affect in a specific way (positively or negatively) the protection of biodiversity and the environment, and if so, the impact should be identified, addressed and clarified in the draft standard;</p> <p>(13) Consider implementation of the standard by contracting parties and identify potential operational and technical implementation issues. Provide information and possible recommendations on these issues to the SC.</p>                                 |
| <p><b>Expertise</b> (this will provide the basis for screening nominations):</p> <p>Six to seven experts who have a wide knowledge in phytosanitary actions including at least one person knowledgeable in authorization programmes and their elements and at least one person knowledgeable in auditing compliance with authorization programmes.</p>   |
| <p><b>References</b> (Relevant ISPMs and national, regional or international standards on the same topic and any specific references that would be relevant during drafting):</p> <p>The IPPC, relevant ISPMs and other national, regional and international standards and agreements as may be applicable to the tasks, and discussion papers submitted in relation to this work.</p> <p>Relevant NAPPO standards:</p> <p><b>NAPPO RSPM No. 9.</b> 2009. <i>The authorization of laboratories for phytosanitary testing</i>. Ottawa, NAPPO.</p> <p><b>NAPPO RSPM No. 28.</b> 2009. <i>Guidelines for authorization of entities to perform phytosanitary services</i>. Ottawa, NAPPO. (currently under revision)</p> |
| <p><b>Literature review</b> (this section will provide a <b>summary of the topic</b> based on scientific and technical publications, including a referenced <b>listed of literature reviewed</b>. This will help provide the scientific basis for the content of the standard to be used by the selected experts during the development of the standard):</p>  |

**Attachment 9: Submission No. 7**

**Title (type of topic):** ISPM XX: 20XX Guidelines for the use of chemical treatments as a phytosanitary measure

**Proposed by/ supported by:** TPPT and supported by: NPPO of Australia, IAPSC, NPPO of Indonesia, NPPO of USA, APPPC, EPPO, NEPPO, COSAVE.

| <b>Submission form for IPPC standard setting work programme topics</b>   |  |  |
|--|--|--|
| <b>Proposed by:</b> Technical Panel on Phytosanitary Treatments (TPPT), Supported by: NPPO of Australia, IAPSC, NPPO of Indonesia, NPPO of USA, APPPC, EPPO, NEPPO, COSAVE   |  |  |
| <b>Contact:</b> (Contact information of an individual able to clarify issues relating to this submission)  |  |  |
| Name: TPPT Steward: Bart Rossel  |  |  |
| Position and organization: Director International Plant Health Program Office of the Australia Chief Plant Protection Officer  |  |  |
| Mailing address: Australian Government Department of Agriculture, Fisheries and Forestry   |  |  |
| Phone: +61 2 6272 5056 / 0408625413 ..... Fax:.....  |  |  |
| E-mail: <a href="mailto:bart.rossel@daff.gov.au">bart.rossel@daff.gov.au</a>   |  |  |
| <b>Type of topic:</b> (Choose one box only)  |  |  |
| A. New ISPM:<br><input checked="" type="checkbox"/> Concept<br><input type="checkbox"/> Pest specific<br><input type="checkbox"/> Commodity specific<br><input type="checkbox"/> Reference   | B. New component to an existing ISPM:<br><input type="checkbox"/> Supplement<br><input type="checkbox"/> Annex<br><input type="checkbox"/> Appendix<br><input type="checkbox"/> Technical Panel (technical area)<br><input type="checkbox"/> DP: Diagnostic protocol (subject)<br><input type="checkbox"/> PT: Phytosanitary treatment (topic)<br><input type="checkbox"/> Glossary term (subject) | C. Revision/Amendment of:<br><input type="checkbox"/> ISPM<br><input type="checkbox"/> Supplement<br><input type="checkbox"/> Annex<br><input type="checkbox"/> Appendix<br><input type="checkbox"/> Glossary term |
| <b>Proposed title of new ISPM or component</b>   |  |  |
| ISPM XX: 20XX <i>Guidelines for the use of chemical treatments as a phytosanitary measure</i>  |  |  |
| <b>Summary justification for the proposal (two sentences maximum):</b>   |  |  |
| In the same manner as ISPM 18:2003 for irradiation treatments, an ISPM for chemical treatments would enhance harmonisation of the implementation (development, approval, safety and application) of this treatment type by member countries. There are a large number of chemical treatments used in international trade, and several submissions of treatment data to the IPPC Secretariat for this type of treatment. Therefore, it is acknowledged that guidelines are needed.  |  |  |
| Submissions should address the applicable criteria for justification of the proposal (as listed below). Where possible, information in support of the justification and that may assist in the prioritization should be indicated.<br><b>All core criteria must be addressed; supporting criteria should be addressed if applicable.</b>   |  |  |
| <b>Core criteria:</b>  |  |  |
| <b>Contribution to the purpose of the IPPC as described in Article I.1.</b>  |  |  |
| This ISPM would secure common and effective actions to prevent the spread and introduction of pests of plants and plant products, and would promote appropriate measures for their control.  |  |  |
| <b>Feasibility of implementation at the global level (includes ease of implementation, technical complexity, capacity of NPPOs to implement, relevance for more than one region).</b>  |  |  |
| The adoption of an ISPM for chemical treatments would be expected to enhance the development and implementation of chemical treatments internationally, especially amongst developing countries. These technologies are not necessarily complex, nor do they need to be based on sophisticated equipment. chemical treatments are in use in many countries but, currently, the risk exists that non-harmonised schedules can lead to confusion. A more harmonised, global strategy for the development and implementation of these treatments is achievable and desirable. |  |  |

**Clear identification of the problems that need to be resolved through the development of the standard.**

This standard is to provide technical guidance for the evaluation, adoption, and use of chemicals as a phytosanitary treatment. It is designed to encourage consistency by providing essential information concerning the technical and operational aspects of using chemicals as a treatment for plant pests.

**Availability of, or possibility to collect, information in support of the proposed standard (e.g. scientific, historical, technical information, experience).**

There is a wealth of information (technical, applied, scientific and historical), technical expertise and operational knowledge on this subject. In addition, meeting reports of the Technical Panel on Phytosanitary Treatments (TPPT) and treatment evaluation guidance material should be referenced.

**Supporting criteria (Practical)**

- Feasibility of adopting the proposed standard within a reasonable time frame.
- Stage of development of the proposed standard (is a standard on the same topic already widely used by NPPOs, RPPOs or a relevant international organization).
- Availability of expertise needed to develop the proposed standard.

The intended that the same manner as ISPM 18:2003 for irradiation treatments, an ISPM for chemical treatments would enhance harmonisation of the implementation (development, approval, safety and application) of this treatment type by member countries. Expertise on the evaluation and implementation chemical treatments is widely available in member countries and is a core requirement of the TPPT.

It is expected that a relatively short time frame will be necessary to develop and adopt this proposed standard because of the large number of submissions of chemical treatments for inclusion in ISPM 28:2003 and because these treatments are widely used in international trade. It is hoped that, by adopting this ISPM, the guidelines could harmonize the implementation of these treatments.

**Supporting criteria (Economic)**

- Estimated value of the plants protected.
- Estimated value of trade affected by the proposed standard (e.g. volume of trade, value of trade, the percentage of Gross Domestic Product of this trade) if appropriate.
- Estimated value of new trade opportunities provided by the approval of the proposed standard.
- Potential benefits in terms of pest control or quarantine activities.

Existing chemical based quarantine treatments are very widely used for international and domestic market access. Countries export or import commodities based on these types of treatment. The value of plants protected would be very large. The elimination of MeBr has necessitated the development of alternatives. Chemical based treatments are being tested. Guidelines on doing this will be very useful and practical.

**Supporting criteria (Environmental)**

- Utility to reduce the potential negative environmental consequences of certain phytosanitary measures, for example reduction in global emissions for the protection of the ozone layer.
- Utility in the management of non indigenous species which are pests of plants (such as some invasive alien species).
- Contribution to the protection of the environment, through the protection of wild flora, and their habitats and ecosystems, and of agricultural biodiversity.

Enhancing the effective and efficient use of chemicals as a phytosanitary treatment would reduce unwanted environmentally impacts and identify replacements for more problematic fumigation treatments (such as methyl bromide) that have significant unwanted environmental impacts. Various types of chemical treatment have been shown to effectively manage the risk from many pests of plants without significant damage to many plant products in international trade.

The treatments would be used in conformance with the laws and regulations of where it is applied.

**Supporting criteria (Strategic)**

- Extent of support for the proposed standard (e.g. one or more NPPOs or RPPOs have requested it, or one or more RPPOs have adopted a standard on the same topic).
- Frequency with which the issue addressed by the proposed standard emerges as a source of trade disruption (e.g. disputes or need for repeated bilateral discussions, number of times per year trade is disrupted).
- Relevance and utility to developing countries.
- Coverage (application to a wide range of countries/pests/commodities).
- Complements other standards (e.g. potential for the standard to be used as part of a systems approach for one pest, complement treatments for other pests).
- Foundation standards to address fundamental concepts (e.g. treatment efficacy, inspection methodology).
- Expected standard longevity (e.g. future trade needs, suggested use of easily outdated technology or products).
- Urgent need for the standard.

Chemical based quarantine treatments are already in widespread use around the world so support for this ISPM would exist. These techniques are simple to apply and easy to assess for treatment efficacy. They are suited to a very large range of products. There is a large number of different treatments under this heading and a standard set of guideline such as envisaged for this ISPM would be very helpful for both new and existing exporters alike. Because there are many chemical-based treatment schedules currently in existence most foundation standards have been set but streamlining needs to be applied for a more harmonious set of guidelines.

**Diagnostic protocols are subject to additional criteria. For proposals for DPs, please elaborate on the following criteria to help the future consideration of the subject proposed:**

N/A

### Draft Specification (No. 7)

**Proposed Title:**

Guidelines for the use of chemicals as a phytosanitary measure

**Reason for the standard** (justification as to why the standard is needed, some of this can be copied from the above submission):

In the same manner as ISPM 18:2003 *Guidelines for irradiation as a phytosanitary measure*, an ISPM for chemical treatments would enhance harmonisation of the implementation (development, approval, safety and application) of this treatment type by member countries. There are a large number of chemical treatments used in international trade, and several submissions of treatment data to the IPPC Secretariat for this type of treatment. Therefore, it is acknowledged that guidelines are needed.

Enhancing the effective and efficient use of chemicals as a phytosanitary treatment would reduce unwanted environmentally impacts and identify replacements for more problematic fumigation treatments (such as methyl bromide) that have significant unwanted environmental impacts. Enhancing and harmonising the implementation of chemical treatments internationally would reduce both the phytosanitary risks of international trade and the economic impacts of phytosanitary measures involving fumigation.

This ISPM would secure common and effective actions to prevent the spread and introduction of pests of plants and plant products, and would promote appropriate measures for their control.

**Purpose** (explain what issue will be addressed and/or harmonized once this standard is put in place):

This standard is to provide technical guidance for the evaluation, adoption, and use of chemicals as a phytosanitary treatment. It is designed to encourage consistency by providing essential information concerning the technical and operational aspects of using chemicals as a treatment for plant pests.

**Scope** (this provides the boundaries or limits to what the standard should cover):

This ISPM should cover common chemical treatment parameters, with each treatment type to be covered separately with specific guidance on dosage, duration, commodity tolerance, type of equipment, monitoring, application, chemical volume and other aspects and components deemed essential.

The scope, purpose, principles, and general format of ISPM 18:2003 should be maintained in the revised standard.

**Tasks for the expert drafting group** (this will help direct the work of the experts):

The expert drafting group should:

- (1) Consider implementation of the standard by IPPC members and identify potential operational and technical implementation issues. Provide information and possible recommendations on these issues to the SC.
- (2) Consider whether food commodities and other available treatments should be included.
- (3) Review draft standards and other technical information available on the application of chemical treatments and prepare an appendix of treatments that are used in international trade and/or published in RSPMs and/or NPPO and RPPO treatment manuals.
- (4) Formulate a standard that provides guidance on the evaluation, adoption and use of chemical treatments, including in particular the efficacy and operational information which may be unique for chemical treatments as opposed to other treatments procedures.
- (5) Identify those treatments listed as part of task 4 that require additional research and communicate this, along with an indication of information requirements for which research is required, to the SC.
- (6) Consider whether it may be appropriate to include guidelines on establishing generic treatments for quarantine pests.
- (7) Consider implementation of the standard by contracting parties and identify potential operational and technical implementation issues. Provide information and possible recommendations on these issues to the SC.
- (8) Consider whether the standard could affect in a specific way (positively or negatively) the protection of biodiversity and the environment. If this is the case, the impact should be identified,



addressed and clarified in the draft standard.

- (9) Consider defining terms

**Expertise** (this will provide the basis for screening nominations):

The EWG should consist of a total of 5-7 phytosanitary experts familiar with chemical treatments. Expertise in chemical based quarantine technology, in particular as regards phytosanitary treatments will also be helpful. Two to three members of this EWG should be members of the Technical panel on phytosanitary treatments (TPPT).

**References** (Relevant ISPMs and national, regional or international standards on the same topic and any specific references that would be relevant during drafting):

ISPM 28:2007

Chemical treatment manuals available internationally e.g. USDA Treatment Manual, USDA Pest programme, USDA emergency response guidelines, Republic of Korea treatment manual, Indonesia and other sources.

TPPT meeting reports and treatment evaluation guidance material.

The IPPC, relevant ISPMs and other national, regional and international standards and agreements as may be applicable to the tasks, and discussion papers submitted in relation to this work.

**Literature review** (this section will provide a **summary of the topic** based on scientific and technical publications, including a referenced **listed of literature reviewed**. This will help provide the scientific basis for the content of the standard to be used by the selected experts during the development of the standard):

USDA Treatment Manual ([http://www.aphis.usda.gov/import\\_export/plants/manuals/online\\_manuals.shtml](http://www.aphis.usda.gov/import_export/plants/manuals/online_manuals.shtml))

USDA Pest Program website: [http://www.aphis.usda.gov/plant\\_health/plant\\_pest\\_info/](http://www.aphis.usda.gov/plant_health/plant_pest_info/)

USDA New pest response guidelines: [http://www.aphis.usda.gov/import\\_export/plants/manuals/emergency/](http://www.aphis.usda.gov/import_export/plants/manuals/emergency/)

Indonesia: [Semi permanent immunization treatment \(SPIT\)](#)

**Attachment 10: Submission No. 8**

**Title (type of topic):** ISPM XX: 20XX Guidelines for the use of fumigation as a phytosanitary measure

**Proposed by/ supported by:** TPPT and supported by: NPPO of Australia, IAPSC, NPPO of Indonesia, NPPO of USA, APPPC, EPPO, NEPPO, COSAVE.

| <b>Submission form for IPPC standard setting work programme topics</b>   |   |   |
|--|---|---|
| <b>Proposed by:</b> Technical Panel on Phytosanitary Treatments (TPPT), Supported by: NPPO of Australia, IAPSC, NPPO of Indonesia, NPPO of USA, APPPC, EPPO, NEPPO, COSAVE   |   |   |
| <b>Contact:</b> (Contact information of an individual able to clarify issues relating to this submission)  |   |   |
| Name: TPPT Steward: Bart Rossel  |   |   |
| Position and organization: Director International Plant Health Program Office of the Australia Chief Plant Protection Officer  |   |   |
| Mailing address: Australian Government Department of Agriculture, Fisheries and Forestry .....   |   |   |
| Phone: +61 2 6272 5056 / 0408625413 ..... Fax:.....  |   |   |
| E-mail: <a href="mailto:bart.rossel@daff.gov.au">bart.rossel@daff.gov.au</a>   |   |   |
| <b>Type of topic:</b> (Choose one box only)  |   |   |
| <b>A. New ISPM:</b><br><input checked="" type="checkbox"/> Concept<br><input type="checkbox"/> Pest specific<br><input type="checkbox"/> Commodity specific<br><input type="checkbox"/> Reference  | <b>B. New component to an existing ISPM:</b><br><input type="checkbox"/> Supplement<br><input type="checkbox"/> Annex<br><input type="checkbox"/> Appendix<br><input type="checkbox"/> Technical Panel (technical area)<br><input type="checkbox"/> DP: Diagnostic protocol (subject)<br><input type="checkbox"/> PT: Phytosanitary treatment (topic)<br><input type="checkbox"/> Glossary term (subject) | <b>C. Revision/Amendment of:</b><br><input type="checkbox"/> ISPM<br><input type="checkbox"/> Supplement<br><input type="checkbox"/> Annex<br><input type="checkbox"/> Appendix<br><input type="checkbox"/> Glossary term |
| <b>Proposed title of new ISPM or component:</b>  |   |   |
| ISPM XX: 20XX <i>Guidelines for the use of fumigation as a phytosanitary measure</i>   |   |   |
| <b>Summary justification for the proposal (two sentences maximum):</b>   |   |   |
| In the same manner as ISPM 18:2003 for irradiation treatments, an ISPM for fumigation treatments would enhance harmonisation of the implementation (development, approval, safety and application) of this treatment type by member countries. There are a large number of fumigation treatments used in international trade, and several submissions of treatment data to the IPPC Secretariat for this type of treatment. Therefore, it is acknowledged that guidelines are needed.  |   |   |
| Submissions should address the applicable criteria for justification of the proposal (as listed below). Where possible, information in support of the justification and that may assist in the prioritization should be indicated.<br><b>All core criteria must be addressed; supporting criteria should be addressed if applicable.</b>   |   |   |
| <b>Core criteria:</b>  |   |   |
| <b>Contribution to the purpose of the IPPC as described in Article I.1.</b>  |   |   |
| This ISPM would secure common and effective actions to prevent the spread and introduction of pests of plants and plant products, and would promote appropriate measures for their control.  |   |   |
| <b>Feasibility of implementation at the global level (includes ease of implementation, technical complexity, capacity of NPPOs to implement, relevance for more than one region).</b>  |   |   |
| The adoption of an ISPM for fumigation treatments would be expected to enhance the development and implementation of fumigation treatments internationally, especially amongst developing countries. These technologies are not necessarily complex, nor do they need to be based on sophisticated equipment. Fumigation treatments are in use in many countries but, currently, the risk exists that non-harmonised schedules can lead to confusion. A more harmonised, global strategy for the development and implementation of these treatments is achievable and desirable. |   |   |

**Clear identification of the problems that need to be resolved through the development of the standard.**

This standard is to provide technical guidance for the evaluation, adoption, and use of fumigation as a phytosanitary treatment. It is designed to encourage consistency by providing essential information concerning the technical and operational aspects of using fumigation as a treatment for plant pests.

**Availability of, or possibility to collect, information in support of the proposed standard (e.g. scientific, historical, technical information, experience).**

There is a wealth of information (technical, applied, scientific and historical), technical expertise and operational knowledge on this subject. In addition, meeting reports of the Technical Panel on Phytosanitary Treatments (TPPT) and treatment evaluation guidance material should be referenced.

**Supporting criteria (Practical)**

- Feasibility of adopting the proposed standard within a reasonable time frame.
- Stage of development of the proposed standard (is a standard on the same topic already widely used by NPPOs, RPPOs or a relevant international organization).
- Availability of expertise needed to develop the proposed standard.

The intended that the same manner as ISPM 18:2003 for irradiation treatments, an ISPM for fumigation treatments would enhance harmonisation of the implementation (development, approval, safety and application) of this treatment type by member countries. Expertise on the evaluation and implementation fumigation treatments is widely available in member countries and is a core requirement of the TPPT.

It is expected that a relatively short time frame will be necessary to develop and adopt this proposed standard because of the large number of submissions of fumigation treatments for inclusion in ISPM 28:2003 and because these treatments are widely used in international trade. It is hoped that, by adopting this ISPM, the guidelines could harmonize the implementation of these treatments.

**Supporting criteria (Economic)**

- Estimated value of the plants protected.
- Estimated value of trade affected by the proposed standard (e.g. volume of trade, value of trade, the percentage of Gross Domestic Product of this trade) if appropriate.
- Estimated value of new trade opportunities provided by the approval of the proposed standard.
- Potential benefits in terms of pest control or quarantine activities.

Existing fumigation treatments are widely used to facilitate international and domestic market access. Countries export or import commodities based on these types of treatment. Therefore, the value of plants protected would be very large. These guidelines will be very useful and practical

**Supporting criteria (Environmental)**

- Utility to reduce the potential negative environmental consequences of certain phytosanitary measures, for example reduction in global emissions for the protection of the ozone layer.
- Utility in the management of non indigenous species which are pests of plants (such as some invasive alien species).
- Contribution to the protection of the environment, through the protection of wild flora, and their habitats and ecosystems, and of agricultural biodiversity.

Enhancing the effective and efficient use of fumigation as a phytosanitary treatment would reduce unwanted environmentally impacts and identify replacements for more problematic fumigation treatments (such as methyl bromide) that have significant unwanted environmental impacts. Various types of fumigation treatment have been shown to effectively manage the risk from many pests of plants without significant damage to many plant products in international trade.

The treatments would be used in conformance with the laws and regulations of where it is applied.

**Supporting criteria (Strategic)**

- Extent of support for the proposed standard (e.g. one or more NPPOs or RPPOs have requested it, or one or more RPPOs have adopted a standard on the same topic).
- Frequency with which the issue addressed by the proposed standard emerges as a source of trade disruption (e.g. disputes or need for repeated bilateral discussions, number of times per year trade is disrupted).
- Relevance and utility to developing countries.
- Coverage (application to a wide range of countries/pests/commodities).
- Complements other standards (e.g. potential for the standard to be used as part of a systems approach for one pest, complement treatments for other pests).
- Foundation standards to address fundamental concepts (e.g. treatment efficacy, inspection methodology).
- Expected standard longevity (e.g. future trade needs, suggested use of easily outdated technology or products).
- Urgent need for the standard.

Fumigation based quarantine treatments are already in widespread use around the world so support for this ISPM would exist. These techniques are simple to apply and easy to assess for treatment efficacy. They are suited to a very large range of products. There is a large number of different treatments under this heading and a standard set of guideline such as envisaged for this ISPM would be very helpful for both new and existing exporters alike. Because there are many fumigation-based treatment schedules currently in existence most foundation standards have been set but streamlining needs to be applied for a more harmonious set of guidelines.

**Diagnostic protocols are subject to additional criteria. For proposals for DPs, please elaborate on the following criteria to help the future consideration of the subject proposed:**

N/A

### Draft Specification (No. 8)

**Proposed Title:**

Guidelines for the use of fumigation as a phytosanitary measure

**Reason for the standard** (justification as to why the standard is needed, some of this can be copied from the above submission):

In the same manner as ISPM 18:2003 *Guidelines for irradiation as a phytosanitary measure*, an ISPM for fumigation treatments would enhance harmonisation of the implementation (development, approval, safety and application) of this treatment type by member countries. There are a large number of fumigation treatments used in international trade, and several submissions of treatment data to the IPPC Secretariat for this type of treatment. Therefore, it is acknowledged that guidelines are needed.

Enhancing the effective and efficient use of fumigation as a phytosanitary treatment would reduce unwanted environmentally impacts and identify replacements for more problematic fumigation treatments (such as methyl bromide) that have significant unwanted environmental impacts. Enhancing and harmonising the implementation of fumigation treatments internationally would reduce both the phytosanitary risks of international trade and the economic impacts of phytosanitary measures involving fumigation.

**Purpose** (explain what issue will be addressed and/or harmonized once this standard is put in place):

This standard is to provide technical guidance for the evaluation, adoption, and use of fumigation as a phytosanitary treatment. It is designed to encourage consistency by providing essential information concerning the technical and operational aspects of using fumigation as a treatment for plant pests.

**Scope** (this provides the boundaries or limits to what the standard should cover):

This ISPM should cover common fumigation treatment parameters, with each treatment type to be covered separately with specific guidance on dosage, duration, commodity tolerance, type of equipment, monitoring, application and other aspects and components deemed essential.

The scope, purpose, principles, and general format of ISPM 18:2003 should be maintained in the revised standard.

**Tasks for the expert drafting group** (this will help direct the work of the experts):

The expert drafting group should:

- (1) Consider implementation of the standard by IPPC members and identify potential operational and technical implementation issues. Provide information and possible recommendations on these issues to the SC.
- (2) Consider whether food commodities and other available treatments should be included.
- (3) Review draft standards and other technical information available on the application of fumigation treatments and prepare an appendix of treatments that are used in international trade and/or published in RSPMs and/or NPPO and RPPO treatment manuals.
- (4) Formulate a standard that provides guidance on the evaluation, adoption and use of fumigation treatments, including in particular the efficacy and operational information which may be unique for fumigation treatments as opposed to other treatments procedures.
- (5) Identify those treatments listed as part of task 4 that require additional research and communicate this, along with an indication of information requirements for which research is required, to the SC.
- (6) Consider whether it may be appropriate to include guidelines on establishing generic treatments for quarantine pests.
- (7) Consider implementation of the standard by contracting parties and identify potential operational and technical implementation issues. Provide information and possible recommendations on these issues to the SC.
- (8) Consider whether the standard could affect in a specific way (positively or negatively) the protection of biodiversity and the environment. If this is the case, the impact should be identified, addressed and clarified in the draft standard.

(9) Consider defining terms

**Expertise** (this will provide the basis for screening nominations):

The EWG should consist of a total of 5-7 phytosanitary experts familiar with fumigation treatments. Expertise in fumigation based quarantine technology, in particular as regards phytosanitary treatments will also be helpful. Two to three members of this EWG should be members of the Technical panel on phytosanitary treatments (TPPT).

**References** (Relevant ISPMs and national, regional or international standards on the same topic and any specific references that would be relevant during drafting):

ISPM 28:2007

Fumigation manuals available internationally e.g. USDA Treatment Manual, Australia DAFF Fumigation Manual, FAO Fumigation manual, Japan MAFF fumigation manual, Indonesia fumigation manual etc.

TPPT meeting reports and treatment evaluation guidance material.

The IPPC, relevant ISPMs and other national, regional and international standards and agreements as may be applicable to the tasks, and discussion papers submitted in relation to this work.

**Literature review** (this section will provide a **summary of the topic** based on scientific and technical publications, including a referenced **listed of literature reviewed**. This will help provide the scientific basis for the content of the standard to be used by the selected experts during the development of the standard):

USDA Treatment Manual ([http://www.aphis.usda.gov/import\\_export/plants/manuals/online\\_manuals.shtml](http://www.aphis.usda.gov/import_export/plants/manuals/online_manuals.shtml))

DAFF Fumigation Manual (<http://www.daff.gov.au/aqis/import/general-info/qftp/treatments-fumigants>)

FAO Manual of fumigation for insect control (<http://www.fao.org/docrep/X5042E/x5042E00.htm#Contents>)

FAO Methyl Bromide Fumigation Manual  
([http://www.fao.org/inpho\\_archive/content/documents/vlibrary/ad416e/TopFrameset.htm?MeBr/fumigating\\_with\\_methyl\\_bromideFrame.htm~rightFrame](http://www.fao.org/inpho_archive/content/documents/vlibrary/ad416e/TopFrameset.htm?MeBr/fumigating_with_methyl_bromideFrame.htm~rightFrame))

Japan MAFF fumigation manual: [http://www.pps.go.jp/law\\_active/Notification/basis/5/9/html/9.html](http://www.pps.go.jp/law_active/Notification/basis/5/9/html/9.html)

Indonesia: <http://www.karantina.deptan.go.id/?page=link>

**Attachment 11: Submission No. 9**

**Title (type of topic):** ISPM XX:20XX Guidelines for the use of temperature treatments as a phytosanitary measure

**Proposed by/ supported by:** TPPT and supported by: NPPO of Australia, IAPSC, NPPO of Indonesia, NPPO of USA, APPPC, EPPO, NEPPO, COSAVE.

| <b>Submission form for IPPC standard setting work programme topics</b>   |  |  |
|--|--|--|
| <b>Proposed by:</b> Technical Panel on Phytosanitary Treatments (TPPT) Supported by: NPPO of Australia, IAPSC, NPPO of Indonesia, NPPO of USA, APPPC, EPPO, NEPPO, COSAVE.   |  |  |
| <b>Contact:</b> (Contact information of an individual able to clarify issues relating to this submission)<br>Name: TPPT Steward: Bart Rossel<br>Position and organization: Director International Plant Health Program Office of the Australia Chief Plant Protection Officer<br>Mailing address: Australian Government Department of Agriculture, Fisheries and Forestry<br>Phone: +61 2 6272 5056 / 0408625413 Fax: .....<br>E-mail: <a href="mailto:bart.rossel@daff.gov.au">bart.rossel@daff.gov.au</a>  |  |  |
| <b>Type of topic:</b> (Choose one box only)  |  |  |
| A. New ISPM:<br><input checked="" type="checkbox"/> Concept<br><input type="checkbox"/> Pest specific<br><input type="checkbox"/> Commodity specific<br><input type="checkbox"/> Reference   | B. New component to an existing ISPM:<br><input type="checkbox"/> Supplement<br><input type="checkbox"/> Annex<br><input type="checkbox"/> Appendix<br><input type="checkbox"/> Technical Panel (technical area)<br><input type="checkbox"/> DP: Diagnostic protocol (subject)<br><input type="checkbox"/> PT: Phytosanitary treatment (topic)<br><input type="checkbox"/> Glossary term (subject) | C. Revision/Amendment of:<br><input type="checkbox"/> ISPM<br><input type="checkbox"/> Supplement<br><input type="checkbox"/> Annex<br><input type="checkbox"/> Appendix<br><input type="checkbox"/> Glossary term |
| <b>Proposed title of new ISPM or component:</b><br>ISPM XX:20XX Guidelines for the use of temperature treatments as a phytosanitary measure  |  |  |
| <b>Summary justification for the proposal (two sentences maximum):</b><br>In the same manner as ISPM 18:2003 for irradiation treatments, an ISPM for temperature treatments would enhance harmonisation of the implementation (development, approval, safety and application) of this treatment type by member countries. There is a large number of international approvals for temperature based treatments as well as several submissions to the IPPC for these types of treatment. Therefore, it is acknowledged that guidelines are needed.   |  |  |
| Submissions should address the applicable criteria for justification of the proposal (as listed below). Where possible, information in support of the justification and that may assist in the prioritization should be indicated.<br><b>All core criteria must be addressed; supporting criteria should be addressed if applicable.</b>   |  |  |
| <b>Core criteria:</b>  |  |  |
| <b>Contribution to the purpose of the IPPC as described in Article I.1.</b><br>This ISPM would secure common and effective actions to prevent the spread and introduction of pests of plants and plant products, and would promote appropriate measures for their control.   |  |  |
| <b>Feasibility of implementation at the global level (includes ease of implementation, technical complexity, capacity of NPPOs to implement, relevance for more than one region).</b><br>The adoption of an ISPM for temperature treatments would be expected to enhance the development and implementation of quarantine treatments internationally, especially amongst developing countries. These technologies are not necessarily complex nor are they needed to be based on sophisticated equipment. Temperature based quarantine treatments are in use in many countries but there is a risk that many schedules will be set up leading to confusion. A more harmonised, global strategy for the development and implementation of these treatments is achievable and desirable. |  |  |

**Clear identification of the problems that need to be resolved through the development of the standard.**

This standard is to provide technical guidance for the evaluation, adoption, and use of temperature management techniques as phytosanitary treatments. It is designed to encourage consistency by providing essential information concerning the technical and operational aspects of using temperature based techniques as treatments for plant pests.

**Availability of, or possibility to collect, information in support of the proposed standard (e.g. scientific, historical, technical information, experience).**

There is a wealth of information (technical, applied, scientific and historical), technical expertise and operational knowledge on this subject. In addition, meeting reports of the Technical Panel on Phytosanitary Treatments (TPPT) and treatment evaluation guidance material should be referenced.

**Supporting criteria (Practical)**

- Feasibility of adopting the proposed standard within a reasonable time frame.
- Stage of development of the proposed standard (is a standard on the same topic already widely used by NPPOs, RPPOs or a relevant international organization).
- Availability of expertise needed to develop the proposed standard.

The intended that, the same manner as ISPM 18:2003 *Guidelines for irradiation as a phytosanitary measure*, an ISPM for the temperature treatments would enhance harmonisation of the implementation (development, approval, safety and application) of this treatment type by member countries. Expertise on the evaluation and implementation of the temperature treatments is widely available in member countries. It is expected that a relatively short time frame will be necessary to develop and adopt this proposed standard because of the large number of submissions of the temperature treatments for inclusion in ISPM 28:2003 and because these treatments are widely used in international trade. It is hoped that, by adopting this ISPM, the guidelines could harmonize the implementation of these treatments.

**Supporting criteria (Economic)**

- Estimated value of the plants protected.
- Estimated value of trade affected by the proposed standard (e.g. volume of trade, value of trade, the percentage of Gross Domestic Product of this trade) if appropriate.
- Estimated value of new trade opportunities provided by the approval of the proposed standard.
- Potential benefits in terms of pest control or quarantine activities.

Existing temperature based quarantine treatments are very widely used for international and domestic market access. Countries export or import commodities based on these types of treatment. Therefore, the value of plants protected would be very large. Recent reductions in approvals for the use of fumigants and some post-harvest insecticides have necessitated the development of alternatives. Temperature based treatments are being tested. Guidelines on doing this will be very useful and practical.

**Supporting criteria (Environmental)**

- Utility to reduce the potential negative environmental consequences of certain phytosanitary measures, for example reduction in global emissions for the protection of the ozone layer.
- Utility in the management of non indigenous species which are pests of plants (such as some invasive alien species).
- Contribution to the protection of the environment, through the protection of wild flora, and their habitats and ecosystems, and of agricultural biodiversity.

Enhancing the effective and efficient use of the large range of different temperature based technologies as phytosanitary treatments would reduce unwanted environmental impacts and identify replacements for treatments (such as fumigation with methyl bromide and insecticide-dipping) that have significant unwanted environmental impacts. Various types of temperature treatments have been shown to effectively manage the risk from many pests of plants without significant damage to many plant products in international trade. The range of such treatments includes heat (hot water, vapour heat, high temperature forced air) and cold treatments. The treatments would be used in conformance with the laws and regulations of where it is applied.



**Supporting criteria (Strategic)**

- Extent of support for the proposed standard (e.g. one or more NPPOs or RPPOs have requested it, or one or more RPPOs have adopted a standard on the same topic).
- Frequency with which the issue addressed by the proposed standard emerges as a source of trade disruption (e.g. disputes or need for repeated bilateral discussions, number of times per year trade is disrupted).
- Relevance and utility to developing countries.
- Coverage (application to a wide range of countries/pests/commodities).
- Complements other standards (e.g. potential for the standard to be used as part of a systems approach for one pest, complement treatments for other pests).
- Foundation standards to address fundamental concepts (e.g. treatment efficacy, inspection methodology).
- Expected standard longevity (e.g. future trade needs, suggested use of easily outdated technology or products).
- Urgent need for the standard.

Temperature based quarantine treatments are already in widespread use around the world so support for this ISPM would exist. These techniques are simple to apply and easy to assess for treatment efficacy. They are suited to a very large range of products. There is a large number of different treatments under this heading and a standard set of guideline such as envisaged for this ISPM would be very helpful for both new and existing exporters alike. Because there are many temperature based treatment schedules currently in existence most foundation standards have been set but streamlining needs to be applied for a more harmonious set of guidelines.

**Diagnostic protocols are subject to additional criteria. For proposals for DPs, please elaborate on the following criteria to help the future consideration of the subject proposed:**

Not applicable

| <b>Draft Specification (No. 9)</b>  |
|---|
| <p><b>Proposed Title:</b><br/>Requirements for the use of temperature treatments as phytosanitary measures</p>  |
| <p><b>Reason for the standard</b> (justification as to why the standard is needed, some of this can be copied from the above submission):<br/>In the same manner as ISPM 18:2003 <i>Guidelines for irradiation as a phytosanitary measure</i>, an ISPM for temperature treatments would enhance harmonisation of the implementation (development, approval, safety and application) of this treatment type by member countries. There are a large number of temperature treatments used in international trade, and several submissions of treatment data to the IPPC Secretariat for this type of treatment. Therefore, it is acknowledged that guidelines are needed.<br/>The adoption of an ISPM for temperature treatments would be expected to enhance the development and implementation of quarantine treatments internationally, especially amongst developing countries. These technologies are not necessarily complex nor are they needed to be based on sophisticated equipment.</p>  |
| <p><b>Purpose</b> (explain what issue will be addressed and/or harmonized once this standard is put in place):<br/>This standard is to provide technical guidance for the evaluation, adoption, and use of temperature management as a phytosanitary treatment. It is designed to encourage consistency by providing essential information concerning the technical and operational aspects of using fumigation as a treatment for plant pests.</p>   |
| <p><b>Scope</b> (this provides the boundaries or limits to what the standard should cover):<br/>This ISPM should cover common temperature based quarantine treatments (e.g. the various heat technologies as well as cold treatment). Each treatment type should be separate with guidelines that specify or suggest temperatures, treatment duration, commodity tolerance, type of treatment equipment, temperature monitoring, application and other aspects/ components deemed essential. These aforementioned treatments are used mainly for perishable horticultural products. There may be a need to extend the types of temperature based treatments to include freezing, superheating and others that are more appropriate for preserved foods.<br/>The scope, purpose, principles, and general format of ISPM 18:2003 should be maintained in the revised standard.</p>  |
| <p><b>Tasks for the expert drafting group</b> (this will help direct the work of the experts):</p> <ol style="list-style-type: none"> <li>1. Define the scope of the proposed standard – food commodities and available treatments to be included</li> <li>2. Review draft standards and other technical information available on the application of temperature management as a phytosanitary treatment and prepare an appendix of treatments that are approved currently for phytosanitary purposes.</li> <li>3. Formulate a standard that provides guidance on the evaluation, adoption and use of temperature based treatments, including in particular the efficacy and operational information which may be unique for irradiation as opposed to other treatments procedures.</li> <li>4. Identify those treatments listed as part of task 2 that require additional research and communicate this, along with an indication of information requirements for which research is required, to the SC.</li> <li>5. Consider the outcomes of the 2013 ECCT meeting and whether they should be included in this standard</li> <li>6. Consider whether it may be appropriate to include guidelines on establishing generic treatments for quarantine pests.</li> <li>7. Consider implementation of the standard by contracting parties and identify potential operational and technical implementation issues. Provide information and possible recommendations on these issues to the SC.</li> </ol> |
| <p><b>Expertise</b> (this will provide the basis for screening nominations):<br/>The EWG should consist of a total of 5-7 phytosanitary experts familiar with temperature treatments. Expertise in temperature based quarantine technology, in particular as regards phytosanitary treatments will also be helpful. Two to three members of this EWG should be members of the Technical panel on phytosanitary treatments (TPPT).</p>   |

**References** (Relevant ISPMs and national, regional or international standards on the same topic and any specific references that would be relevant during drafting):

Relevant ISPMs; IAEA standards, meeting reports and recommendations of expert meetings; APHIS/USDA Treatment Manual; relevant NAPPO and other NPPO and RPPO standards, submissions to the IPPC on temperature based treatments

ISPM 28:2007

TPPT meeting reports and treatment evaluation guidance material.

The IPPC, relevant ISPMs and other national, regional and international standards and agreements as may be applicable to the tasks, and discussion papers submitted in relation to this work.

**Literature review** (this section will provide a **summary of the topic** based on scientific and technical publications, including a referenced **listed of literature reviewed**. This will help provide the scientific basis for the content of the standard to be used by the selected experts during the development of the standard):

The list of references on temperature based quarantine treatments is very large as these treatments have been studied for about 100 years in many countries, on a large number of food commodities and their pests.

**Attachment 12: Submission No. 10**

**Title (type of topic):** ISPM XX: 20XX Guidelines for the use of modified atmosphere treatments as a phytosanitary measure

**Proposed by/ supported by:** TPPT and supported by NPPO of Australia, IAPSC, NPPO of Indonesia, NPPO of USA, APPPC, EPPO, NEPPO, COSAVE.

| <b>Submission form for IPPC standard setting work programme topics</b>   |  |  |
|--|--|--|
| <b>Proposed by:</b> Technical Panel on Phytosanitary Treatments (TPPT) Supported by: NPPO of Australia, IAPSC, NPPO of Indonesia, NPPO of USA, APPPC, EPPO, NEPPO, COSAVE  |  |  |
| <b>Contact:</b> (Contact information of an individual able to clarify issues relating to this submission)<br>Name: TPPT Steward: Bart Rossel<br>Position and organization: Director International Plant Health Program Office of the Australia Chief Plant Protection Officer<br>Mailing address: Australian Government Department of Agriculture, Fisheries and Forestry .....<br>Phone: +61 2 6272 5056 / 0408625413 ..... Fax: .....<br>E-mail: <a href="mailto:bart.rossel@daff.gov.au">bart.rossel@daff.gov.au</a>  |  |  |
| <b>Type of topic:</b> (Choose one box only)  |  |  |
| A. New ISPM:<br><input checked="" type="checkbox"/> Concept<br><input type="checkbox"/> Pest specific<br><input type="checkbox"/> Commodity specific<br><input type="checkbox"/> Reference   | B. New component to an existing ISPM:<br><input type="checkbox"/> Supplement<br><input type="checkbox"/> Annex<br><input type="checkbox"/> Appendix<br><input type="checkbox"/> Technical Panel (technical area)<br><input type="checkbox"/> DP: Diagnostic protocol (subject)<br><input type="checkbox"/> PT: Phytosanitary treatment (topic)<br><input type="checkbox"/> Glossary term (subject) | C. Revision/Amendment of:<br><input type="checkbox"/> ISPM<br><input type="checkbox"/> Supplement<br><input type="checkbox"/> Annex<br><input type="checkbox"/> Appendix<br><input type="checkbox"/> Glossary term |
| <b>Proposed title of new ISPM or component:</b><br>ISPM XX: 20XX <i>Guidelines for the use of modified atmosphere treatments as a phytosanitary measure</i>  |  |  |
| <b>Summary justification for the proposal (two sentences maximum):</b><br>In the same manner as ISPM 18:2003 <i>Guidelines for irradiation as a phytosanitary measure</i> , an ISPM for modified atmosphere treatments would enhance harmonisation of the implementation (development, approval, safety and application) of this treatment type by member countries. In addition, there are submissions of treatment data to the IPPC Secretariat for this type of treatment, indicating a need for the treatment. Therefore, it is acknowledged that guidelines are needed.   |  |  |
| Submissions should address the applicable criteria for justification of the proposal (as listed below). Where possible, information in support of the justification and that may assist in the prioritization should be indicated.<br><b>All core criteria must be addressed; supporting criteria should be addressed if applicable.</b>   |  |  |
| <b>Core criteria:</b>  |  |  |
| <b>Contribution to the purpose of the IPPC as described in Article I.1.</b><br><br>This ISPM would secure common and effective actions to prevent the spread and introduction of pests of plants and plant products, and would promote appropriate measures for their control.   |  |  |
| <b>Feasibility of implementation at the global level (includes ease of implementation, technical complexity, capacity of NPPOs to implement, relevance for more than one region).</b><br><br>The adoption of an ISPM for modified atmosphere treatments would enhance the development and implementation of modified atmosphere treatments internationally, especially among developing countries. These technologies are not necessarily complex, nor do they need to be based on sophisticated equipment. Modified atmosphere treatments are in use in many countries but, currently, the risk exists that non-harmonised schedules can lead to confusion. A more harmonised, global strategy for the development and implementation of these treatments is achievable and desirable. Modified atmosphere phytosanitary treatments are among the most complicated of all treatments that have achieved any level of application because several factors (e.g., |  |  |

atmospheric components, temperature, humidity) must be measured and controlled.

**Clear identification of the problems that need to be resolved through the development of the standard.**

This standard will provide technical guidance for the evaluation, adoption, and use of modified atmosphere as a phytosanitary treatment. It is designed to encourage consistency by providing essential information concerning the technical and operational aspects of using modified atmosphere as a treatment for plant pests.

**Availability of, or possibility to collect, information in support of the proposed standard (e.g. scientific, historical, technical information, experience).**

There is a wealth of information (technical, applied, scientific and historical), technical expertise and operational knowledge on this subject. In addition, meeting reports of the Technical Panel on Phytosanitary Treatments (TPPT) and treatment evaluation guidance material should be referenced.

**Supporting criteria (Practical)**

- Feasibility of adopting the proposed standard within a reasonable time frame.
- Stage of development of the proposed standard (is a standard on the same topic already widely used by NPPOs, RPPOs or a relevant international organization).
- Availability of expertise needed to develop the proposed standard.

It is expected that a relatively short time frame may not be possible to develop and adopt this proposed standard because it is not used in international trade and is a very complex treatment, with many factors affecting efficacy. In addition, this proposed ISPM may direct research to address these issues. It is hoped that, by adopting this ISPM, the guidelines could harmonize the implementation of modified atmosphere treatments.

**Supporting criteria (Economic)**

- Estimated value of the plants protected.
- Estimated value of trade affected by the proposed standard (e.g. volume of trade, value of trade, the percentage of Gross Domestic Product of this trade) if appropriate.
- Estimated value of new trade opportunities provided by the approval of the proposed standard.
- Potential benefits in terms of pest control or quarantine activities.

Recent reductions in approvals for the use of fumigants and some post-harvest insecticides have necessitated the development of alternatives. These guidelines will be very useful and practical.

**Supporting criteria (Environmental)**

- Utility to reduce the potential negative environmental consequences of certain phytosanitary measures, for example reduction in global emissions for the protection of the ozone layer.
- Utility in the management of non indigenous species which are pests of plants (such as some invasive alien species).
- Contribution to the protection of the environment, through the protection of wild flora, and their habitats and ecosystems, and of agricultural biodiversity.

The effective and efficient use of modified atmosphere as a phytosanitary treatment would reduce unwanted environmental impacts and identify replacements for more problematic treatments (such as methyl bromide and insecticide-dipping) that have significant unwanted environmental impacts. Various types of modified atmosphere treatments have been shown to effectively manage the risk from many pests of plants without significant damage to many plant products in international trade. The range of such treatments includes heat (hot water, vapour heat, high temperature forced air) and cold storage treatments.

The treatments would be used in conformance with the laws and regulations of where it is applied.

**Supporting criteria (Strategic)**

- Extent of support for the proposed standard (e.g. one or more NPPOs or RPPOs have requested it, or one or more RPPOs have adopted a standard on the same topic).
- Frequency with which the issue addressed by the proposed standard emerges as a source of trade disruption (e.g. disputes or need for repeated bilateral discussions, number of times per year trade is disrupted).
- Relevance and utility to developing countries.
- Coverage (application to a wide range of countries/pests/commodities).
- Complements other standards (e.g. potential for the standard to be used as part of a systems approach for one pest, complement treatments for other pests).
- Foundation standards to address fundamental concepts (e.g. treatment efficacy, inspection methodology).
- Expected standard longevity (e.g. future trade needs, suggested use of easily outdated technology or products).
- Urgent need for the standard.

Modified atmosphere treatments are not currently being used in international trade because they are a relatively new concept. However, guidelines have been developed and published in the USDA treatment manual and it has a relatively broad pest coverage potential, so it is expected that these treatments may be used in international trade in the future. While it may seem that there is no urgent need for the standard, there have been treatment data submissions to the IPPC Secretariat for modified atmosphere treatments, so members of the IPPC should consider developing guidelines for research and use of this treatment, leading to the adoption and implementation of both the proposed ISPM and the treatment schedule.

**Diagnostic protocols are subject to additional criteria. For proposals for DPs, please elaborate on the following criteria to help the future consideration of the subject proposed:**

N/A

### Draft Specification (No. 10)

**Proposed Title:**

Guidelines for the use of modified atmospheres as a phytosanitary measure

**Reason for the standard** (justification as to why the standard is needed, some of this can be copied from the above submission):

Enhancing the effective and efficient use of modified atmosphere as a phytosanitary treatment would reduce unwanted environmentally impacts and identify replacements for more problematic fumigation treatments (such as methyl bromide) that have significant unwanted environmental impacts. Enhancing and harmonising the implementation of modified atmosphere treatments internationally would reduce both the phytosanitary risks of international trade and the economic impacts of phytosanitary measures involving fumigation. This ISPM would secure common and effective actions to prevent the spread and introduction of pests of plants and plant products, and would promote appropriate measures for their control.

**Purpose** (explain what issue will be addressed and/or harmonized once this standard is put in place):

This standard is to provide technical guidance for the evaluation, adoption, and use of modified atmosphere as a phytosanitary treatment. It is designed to encourage consistency by providing essential information concerning the technical and operational aspects of using modified atmosphere as a treatment for plant pests.

**Scope** (this provides the boundaries or limits to what the standard should cover):

This ISPM should cover common modified atmosphere treatment parameters, with each treatment type to be covered separately with specific guidance on atmosphere composition, treatment temperature, dosage, duration, commodity tolerance, type of equipment, monitoring, application and other aspects and components deemed essential.

The scope, purpose, principles, and general format of ISPM 18:2003 should be maintained in the revised standard.

**Tasks for the expert drafting group** (this will help direct the work of the experts):

The expert drafting group should:

- (1) Consider implementation of the standard by IPPC members and identify potential operational and technical implementation issues. Provide information and possible recommendations on these issues to the SC.
- (2) Consider whether food commodities and other available treatments should be included.
- (3) Review draft standards and other technical information available on the application of modified atmosphere treatments and prepare an appendix of treatments that are used in international trade and/or published in RSPMs and/or NPPO and RPPO treatment manuals.
- (4) Formulate a standard that provides guidance on the evaluation, adoption and use of modified atmosphere treatments, including in particular the efficacy and operational information which may be unique for modified atmosphere treatments as opposed to other treatments procedures.
- (5) Identify those treatments listed as part of task 4 that require additional research and communicate this, along with an indication of information requirements for which research is required, to the SC.
- (6) Consider whether it may be appropriate to include guidelines on establishing generic treatments for quarantine pests.
- (7) Consider implementation of the standard by contracting parties and identify potential operational and technical implementation issues. Provide information and possible recommendations on these issues to the SC.
- (8) Consider whether the standard could affect in a specific way (positively or negatively) the protection of biodiversity and the environment. If this is the case, the impact should be identified, addressed and clarified in the draft standard.
- (9) Consider defining terms

**Expertise** (this will provide the basis for screening nominations):

The EWG should consist of a total of 5-7 phytosanitary experts familiar with modified atmosphere treatments. Expertise in modified atmosphere quarantine technology, in particular as regards phytosanitary treatments will also be helpful. Two to three members of this EWG should be members of the Technical panel on phytosanitary treatments (TPPT).

**References** (Relevant ISPMs and national, regional or international standards on the same topic and any specific references that would be relevant during drafting):

ISPM 28:2007

Fumigation manuals available internationally e.g. USDA Treatment Manual.

TPPT meeting reports and treatment evaluation guidance material.

The IPPC, relevant ISPMs and other national, regional and international standards and agreements as may be applicable to the tasks, and discussion papers submitted in relation to this work.

**Literature review** (this section will provide a **summary of the topic** based on scientific and technical publications, including a referenced **listed of literature reviewed**. This will help provide the scientific basis for the content of the standard to be used by the selected experts during the development of the standard):

USDA Treatment Manual ([http://www.aphis.usda.gov/import\\_export/plants/manuals/online\\_manuals.shtml](http://www.aphis.usda.gov/import_export/plants/manuals/online_manuals.shtml))



**Attachment 13: Submission No. 16****Title (type of topic):** ISPM5 Glossary of Phytosanitary Terms**Proposed by/ supported by:** CBD

| <b>Submission form for IPPC standard setting work programme topics</b>  |  |  |
|---|--|--|
| <b>Proposed by:</b> Secretariat of the Convention on Biological Diversity   |  |  |
| <b>Contact:</b> (Contact information of an individual able to clarify issues relating to this submission)<br>Name: Junko Shimura<br>Position and organization: Programme Officer, UN Secretariat of the Convention on Biological Diversity<br>Mailing address: 413 St-Jacques Street Suite800, Montreal QC H2Y 1N9, Canada<br>Phone: +1-514-287-8706 Fax: +1 514-288-6588<br>E-mail: <a href="mailto:junko.shimura@cbd.int">junko.shimura@cbd.int</a>   |  |  |
| <b>Type of topic:</b> (Choose one box only)   |  |  |
| A. New ISPM:<br><input type="checkbox"/> Concept<br><input type="checkbox"/> Pest specific<br><input type="checkbox"/> Commodity specific<br><input type="checkbox"/> Reference   | B. New component to an existing ISPM:<br><input type="checkbox"/> Supplement<br><input type="checkbox"/> Annex<br><input type="checkbox"/> Appendix<br><input type="checkbox"/> Technical Panel (technical area)<br><input type="checkbox"/> DP: Diagnostic protocol (subject)<br><input type="checkbox"/> PT: Phytosanitary treatment (topic)<br><input type="checkbox"/> Glossary term (subject) | C. Revision/Amendment of:<br><input checked="" type="checkbox"/> ISPM<br><input type="checkbox"/> Supplement<br><input type="checkbox"/> Annex<br><input type="checkbox"/> Appendix<br><input checked="" type="checkbox"/> Glossary term |
| <b>Proposed title of new ISPM or component:</b><br><u>amended:</u><br>ISPM5 Glossary of Phytosanitary Terms   |  | <b>Title of document to be revised or amended:</b>   |
| <b>Summary justification for the proposal (two sentences maximum):</b><br><br>To ensure effective action to prevent the introduction and spread of pests and diseases of plants and plant products that have the potential to affect biodiversity and ecosystems. The proposed revision would facilitate the recognition by NPPOs and other relevant national authorities, where appropriate, of invasive alien species as pests of plants.   |  |  |
| <b>Submissions should address the applicable criteria for justification of the proposal (as listed below). Where possible, information in support of the justification and that may assist in the prioritization should be indicated. All core criteria must be addressed; supporting criteria should be addressed if applicable.</b>   |  |  |
| <b>Core criteria:</b>   |  |  |
| <b>Contribution to the purpose of the IPPC as described in Article I.1.</b><br><br>This proposal is for securing common and effective actions of the contracting parties to the IPPC to prevent introduction and spread of invasive alien species which carry risks of becoming pests. By the proposed revision of ISPM:5(2013) contracting Parties to the IPPC and the CBD will be able to promote coherent and consistent actions to reduce the negative impact of alien species on plants, plant products, as well as biodiversity and the environment, by implementing the relevant ISPMs with common understanding of the standards and terms.   |  |  |
| <b>Feasibility of implementation at the global level (includes ease of implementation, technical complexity, capacity of NPPOs to implement, relevance for more than one region).</b><br><br>Harmonization of terminology will facilitate the collaboration between NPPOs and the authority for the environment. The existing framework of the IPPC and the activities of NPPOs are highly relevant to prevent new entry and spread of alien species that carry risks of becoming pests to plants and plant products, thereby improving the implementation of relevant ISPMs.<br>The risk of biological invasion of alien species is common in the regions where their climate and ecosystems are similar. Therefore, the relevance is for more than one region and assessing the risks of alien species is relevant to global level. |  |  |

**Clear identification of the problems that need to be resolved through the development of the standard.**

Current ISPM:5 (2013) contains notes in appendix 1 that are not consistent with revised ISPM:11(2012). This proposed revision on ISPM:5(2013) will clarify the terminology and role of NPPOs relevant to addressing the risks associated with invasive alien species considered as pests with appropriate pest risk analysis described in ISPM:11(2013).

**Availability of, or possibility to collect, information in support of the proposed standard (e.g. scientific, historical, technical information, experience).**

Article 8h of the Convention on Biological Diversity (CBD) calls for prevention, control and eradication of alien species which threaten biodiversity, and various decisions of the Conference of the Parties to the CBD have requested enhanced collaboration between the IPPC and the CBD to address invasive alien species. In 2012 the CPM7 approved ISPM:11(2012), in which invasive alien species that are injurious to plants and plant products are considered as pests and their risks should be analysed with the ISPM:11(2012). Thereby, the phytosanitary measures for “pests of plant” could be applied to prevention and management of “invasive alien species”.

Annex1 attached to ISPM:11(2012) clearly indicates that the risk of invasive plants can be assessed by this standard. The

guidelines developed by the World Organization for Animal Health (OIE) to assess risks of invasive animals, which have been welcomed by the COP to the CBD, are also relevant. However, there are no fully developed or standardized PRA methods within the SPS framework that specifically assess the risk of alien species for biodiversity and the environment. Guidance for risk identification and selecting appropriate risk analysis method could be included in the proposed revision of ISPM:5 to assist users of the relevant ISPMs, including ISPM:11(2013).

**Supporting criteria (Practical)**

- **Feasibility of adopting the proposed standard within a reasonable time frame.**
- **Stage of development of the proposed standard (is a standard on the same topic already widely used by NPPOs, RPPOs or a relevant international organization).**
- **Availability of expertise needed to develop the proposed standard.**

The proposed revision of ISPM:5 aims to maintain consistency with Annex 1 attached to ISPM:11(2012) and the phytosanitary terms described in ISPM:5(2013). The definition of invasive alien plants in Annex 1 to ISPM:11(2012) is straight forward and it would be feasible to review the contents by experts within one year and adoption at the CPM immediately thereafter. The expertise for required review process is available *inter alia* through the inter-agency liaison group for invasive alien species (<http://cbd.int/invasive/lg/>).

**Supporting criteria (Economic)**

- **Estimated value of the plants protected.**
- **Estimated value of trade affected by the proposed standard (e.g. volume of trade, value of trade, the percentage of Gross Domestic Product of this trade) if appropriate.**
- **Estimated value of new trade opportunities provided by the approval of the proposed standard.**
- **Potential benefits in terms of pest control or quarantine activities.**

The known cost of management (including eradication) of invasive alien species and economic loss caused by invasive alien species reach several billion US dollars per country. One study showed that the annual cost for invasive alien species corresponds to 5% of GDP globally (Pimentel et al. Agriculture, Ecosystems and Environment 84 (2001) 1–20 ). Application of phytosanitary measures to prevent introduction of invasive alien species will be the most cost effective method to avoid the above. It is clear that the proposed revision of ISPM:5 will support parties in economic aspects.

**Supporting criteria (Environmental)**

- **Utility to reduce the potential negative environmental consequences of certain phytosanitary measures, for example reduction in global emissions for the protection of the ozone layer.**
- **Utility in the management of non indigenous species which are pests of plants (such as some invasive alien species).**
- **Contribution to the protection of the environment, through the protection of wild flora, and their habitats and ecosystems, and of agricultural biodiversity.**

Prevention and management of the risk of invasive alien species with effective quarantine and phytosanitary measures will conserve wild flora, their habitats and the ecosystems, and of agricultural biodiversity. Protection of plants in forests and wet lands also contribute reduction of Greenhouse Gas emission and mitigate the impact of climate change globally.

**Supporting criteria (Strategic)**

- **Extent of support for the proposed standard (e.g. one or more NPPOs or RPPOs have requested it, or one or more RPPOs have adopted a standard on the same topic).**
- **Frequency with which the issue addressed by the proposed standard emerges as a source of trade disruption (e.g. disputes or need for repeated bilateral discussions, number of times per year trade is disrupted).**
- **Relevance and utility to developing countries.**
- **Coverage (application to a wide range of countries/pests/commodities).**
- **Complements other standards (e.g. potential for the standard to be used as part of a systems approach for one pest, complement treatments for other pests).**
- **Foundation standards to address fundamental concepts (e.g. treatment efficacy, inspection methodology).**
- **Expected standard longevity (e.g. future trade needs, suggested use of easily outdated technology or products).**
- **Urgent need for the standard.**

Opportunities of movement of alien (non-native) species in goods, commodities, containers or its introduction as plants for planting are rapidly increasing with expanding scale of international trade. It is urgent to take appropriate phytosanitary measures to prevent and manage invasive alien species with the NPPOs and RPPOs, in collaboration with authorities for the environment, as appropriate.

Phytosanitary terms related to invasive alien species are critically important for contracting parties to the IPPC and the CBD to take measures for preventing the risks posed by invasive alien species. Invasive alien species may include invasive plants, pests that are injurious to plants and plant products distributed outside natural range.

**Diagnostic protocols are subject to additional criteria. For proposals for DPs, please elaborate on the following criteria to help the future consideration of the subject proposed:**

N/A

| <b>Draft Specification (No. 16)</b>  |
|--|
| <b>Proposed Title:</b> ISPM5 Glossary of Phytosanitary Terms (Revision/Amendment)  |
| <b>Reason for the standard</b> (justification as to why the standard is needed, some of this can be copied from the above submission):<br><br>To prevent new entry and spread of pests that are potentially affect biodiversity and the environment, invasive alien species have to be recognized as pests by NPPOs and the relevant authorities for the environment to take appropriate measures. Standard terms that will be shared among the communities of the IPPC and the CBD will facilitate the implementation of phytosanitary measures to protect biodiversity and the environment.  |
| <b>Purpose</b> (explain what issue will be addressed and/or harmonized once this standard is put in place):<br><br>To harmonize the terminology used under the IPPC (e.g. invasive plants as pests in annex 1 to ISPM:11(2013) ) and the CBD (e.g. relevant bodies and organizations to promote clarification and common understanding of terminology related to invasive alien species in paragraph 67 of decision VIII/27), and to facilitate the application of phytosanitary measures to protect biodiversity and the environment.   |
| <b>Scope</b> (this provides the boundaries or limits to what the standard should cover):<br><br>The proposed revision provides harmonization of terminology between the IPPC and the CBD regarding pests and invasive alien species that are considered under the ISPM:11(2013). Other standards that are applicable for prevention and management of risks posed by invasive alien species will also be reviewed and reflected the harmonized terminology with the proposed revision. The terms already included also need to be reviewed whether the other convention's terms carry different meaning, of which case harmonization of terminology has to be considered and reflected to ISPM:5.  |
| <b>Tasks for the expert drafting group</b> (this will help direct the work of the experts):<br><br>Inclusion of "Article 8(h) of the CBD" , "alien species" and "invasive alien species" as standard terms in ISPM:5; <ul style="list-style-type: none"> <li>• Adding appropriate explanation of invasive species and invasive alien species as pests;</li> <li>• Harmonization and providing reference to the CBD for the following terms relevant to invasive species: <ul style="list-style-type: none"> <li>○ Containment;</li> <li>○ Eradication;</li> <li>○ Establishment;</li> <li>○ Invasive alien species;</li> <li>○ Invasive species;</li> <li>○ Introduction;</li> <li>○ Pest risk analysis;</li> <li>○ Protected area.</li> </ul> </li> <li>• Following revision, appendix 1 attached to ISPM:5(2012) could be redundant and it could be deleted.</li> </ul>  |
| <b>Expertise</b> (this will provide the basis for screening nominations): <ul style="list-style-type: none"> <li>• Secretariat of the Convention on Biological Diversity;</li> <li>• CABI</li> <li>• IUCN-Species Survival Commission, Invasive Species Specialists Group;</li> <li>• European and Mediterranean Plant Protection Organization;</li> <li>• North American Plant Protection Organization;</li> <li>• Other NPPOs.</li> </ul>  |
| <b>References</b> (Relevant ISPMs and national, regional or international standards on the same topic and any specific references that would be relevant during drafting):<br><br>- ISPM:11(2012)<br>- WTO: 2012 NEWS ITEMS, 12 and 13 July 2012, SANITARY, PHYTOSANITARY MEASURES: 'INVASIVE ALIEN SPECIES' SEMINAR <a href="http://www.wto.org/english/news_e/news12_e/sps_18jul12_e.htm#study">http://www.wto.org/english/news_e/news12_e/sps_18jul12_e.htm#study</a><br>- Article 8(h) of the Convention on Biological Diversity <a href="http://www.cbd.int/convention/articles/default.shtml?a=cbd-08">http://www.cbd.int/convention/articles/default.shtml?a=cbd-08</a><br>- Guiding Principles for the Prevention, Introduction and Mitigation of the Impacts of Alien Species that Threaten Ecosystems, Habitats or Species (annex to decision VI/23): <a href="http://www.cbd.int/decision/cop/default.shtml?id=7197">http://www.cbd.int/decision/cop/default.shtml?id=7197</a><br>- COP decisions on Article 8(h) <a href="http://www.cbd.int/invasive/cop-decisions.shtml">http://www.cbd.int/invasive/cop-decisions.shtml</a> |
| <b>Literature review</b> (this section will provide a <b>summary of the topic</b> based on scientific and technical publications, including a referenced <b>listed of literature reviewed</b> . This will help provide the scientific basis for the content of the standard to be used by the selected experts during the development of the standard)   |

**Attachment 14: Submission No. 17**

**Title (type of topic):** ISPM 18: 20XX Guidelines for the use of irradiation as a phytosanitary measure (Revision to ISPM 18)

**Proposed by/ supported by:** TPPT Supported by: NPPO of Australia, IAPSC, NPPO of Indonesia, NPPO of USA, APPPC, EPPO, NEPPO, COSAVE

| <b>Submission form for IPPC standard setting work programme topics</b>   |  |   |
|--|--|---|
| <b>Proposed by:</b> Technical Panel on Phytosanitary Treatments (TPPT), Supported by: NPPO of Australia, IAPSC, NPPO of Indonesia, NPPO of USA, APPPC, EPPO, NEPPO, COSAVE   |  |   |
| <b>Contact:</b> (Contact information of an individual able to clarify issues relating to this submission)<br>Name: TPPT Steward Bart Rossel<br>Position and organization: Director International Plant Health Program Office of the Australia Chief Plant Protection Officer<br>Mailing address: Australian Government Department of Agriculture, Fisheries and Forestry .....<br>Phone: +61 2 6272 5056 / 0408625413 ..... Fax:<br>E-mail: <a href="mailto:bart.rossel@daff.gov.au">bart.rossel@daff.gov.au</a> |  |   |
| <b>Type of topic:</b> (Choose one box only)  |  |   |
| A. New ISPM:<br><input type="checkbox"/> Concept<br><input type="checkbox"/> Pest specific<br><input type="checkbox"/> Commodity specific<br><input type="checkbox"/> Reference  | B. New component to an existing ISPM:<br><input type="checkbox"/> Supplement<br><input type="checkbox"/> Annex<br><input type="checkbox"/> Appendix<br><input type="checkbox"/> Technical Panel (technical area)<br><input type="checkbox"/> DP: Diagnostic protocol (subject)<br><input type="checkbox"/> PT: Phytosanitary treatment (topic)<br><input type="checkbox"/> Glossary term (subject) | C. Revision/Amendment of:<br><input checked="" type="checkbox"/> ISPM<br><input type="checkbox"/> Supplement<br><input type="checkbox"/> Annex<br><input type="checkbox"/> Appendix<br><input type="checkbox"/> Glossary term |
| <b>Proposed title of new ISPM or component:</b> _____ <b>or</b> _____ <b>Title of document to be revised or amended:</b>   |  |   |
| ISPM 18: 20XX <i>Guidelines for the use of irradiation as a phytosanitary measure</i>  |  |   |
| <b>Summary justification for the proposal (two sentences maximum):</b><br>ISPM 18:2003 has a number of inconsistencies with ISPM 28:2007 and contains information in the appendices that are out-of-date and not in line with current best practice. In addition, new information will be made available from the Cooperative Research Project in April 2014.  |  |   |
| <b>Submissions should address the applicable criteria for justification of the proposal (as listed below). Where possible, information in support of the justification and that may assist in the prioritization should be indicated. All core criteria must be addressed; supporting criteria should be addressed if applicable.</b>  |  |   |
| <b>Core criteria:</b>  |  |   |
| <b>Contribution to the purpose of the IPPC as described in Article I.1.</b><br><br>This ISPM would secure common and effective actions to prevent the spread and introduction of pests of plants and plant products, and would promote appropriate measures for their control  |  |   |
| <b>Feasibility of implementation at the global level (includes ease of implementation, technical complexity, capacity of NPPOs to implement, relevance for more than one region).</b><br><br>The revision of ISPM 18:2003 is expected to enhance the implementation of this standard by reducing technical complexity.   |  |   |
| <b>Clear identification of the problems that need to be resolved through the development of the standard.</b><br>It is now apparent that ISPM 18:2003 has a number of inconsistencies with ISPM 28:2007 that should be resolved. These include in ISPM 18:2003:<br>..... Annex 1: ( <i>Specific approved treatments</i> ) that was intended to hold a list of approved irradiation treatments that are now included in ISPM 28:2007;   |  |   |

..... Appendix 1: (*Estimated minimum absorbed doses for certain responses for selected pest groups*) that holds information that is out-of-date and should either be updated or the appendix removed from the ISPM;

..... Appendix 2: (*Research Protocol*) that is out-of-date and should be reviewed to include the latest learning's from the work of the TPPT and the International Atomic Energy Agency (IAEA).

**Availability of, or possibility to collect, information in support of the proposed standard (e.g. scientific, historical, technical information, experience).**

- Hallman, G. J. 2012. Generic phytosanitary irradiation treatments. Rad. Physics Chem. 81: 861-866.
- IAEA 2012. The Development of Generic Irradiation Doses for Quarantine Treatments. Report of the 3rd Research Coordination meeting Buenos Aires, Argentina, 15 – 19 October 2012: pp43.
- TPPT meeting reports and treatment evaluation guidance material.
- CRP 2014 outcomes

**Supporting criteria (Practical)**

- Feasibility of adopting the proposed standard within a reasonable time frame.
- Stage of development of the proposed standard (is a standard on the same topic already widely used by NPPOs, RPPOs or a relevant international organization).
- Availability of expertise needed to develop the proposed standard.

The intended revision of ISPM 18:2003 is expected to enhance member capacity to implement the ISPM. ISPM 18:2003 is widely used by those member countries and regions implementing the use of irradiation as a phytosanitary treatment in international trade. The expertise required to successfully revise ISPM 18:2003 is available within the TPPT and IAEA.

**Supporting criteria (Economic)**

- Estimated value of the plants protected.
- Estimated value of trade affected by the proposed standard (e.g. volume of trade, value of trade, the percentage of Gross Domestic Product of this trade) if appropriate.
- Estimated value of new trade opportunities provided by the approval of the proposed standard.
- Potential benefits in terms of pest control or quarantine activities.

Existing irradiation treatments are widely used to facilitate international and domestic market access. Countries export or import commodities based on these types of treatment. Therefore, the value of plants protected would be very large. Recent reductions in approvals for the use of fumigants and some post-harvest insecticides have necessitated the development of alternatives. These guidelines will be very useful and practical

**Supporting criteria (Environmental)**

- Utility to reduce the potential negative environmental consequences of certain phytosanitary measures, for example reduction in global emissions for the protection of the ozone layer.
- Utility in the management of non indigenous species which are pests of plants (such as some invasive alien species).
- Contribution to the protection of the environment, through the protection of wild flora, and their habitats and ecosystems, and of agricultural biodiversity.

The use of irradiation as a phytosanitary treatment has no unwanted environmental impacts and can replace the use of other treatments (such as methyl bromide). Irradiation has been shown to effectively manage the risk from many pests of plants without significant damage to many plant products in international trade.

**Supporting criteria (Strategic)**

- Extent of support for the proposed standard (e.g. one or more NPPOs or RPPOs have requested it, or one or more RPPOs have adopted a standard on the same topic).
- Frequency with which the issue addressed by the proposed standard emerges as a source of trade disruption (e.g. disputes or need for repeated bilateral discussions, number of times per year trade is disrupted).
- Relevance and utility to developing countries.
- Coverage (application to a wide range of countries/pests/commodities).
- Complements other standards (e.g. potential for the standard to be used as part of a systems approach for one pest, complement treatments for other pests).
- Foundation standards to address fundamental concepts (e.g. treatment efficacy, inspection methodology).
- Expected standard longevity (e.g. future trade needs, suggested use of easily outdated technology or products).
- Urgent need for the standard.

Irradiation treatments are already in widespread use around the world, ensuring that support for this ISPM exists. These techniques are easy to apply and to assess for treatment efficacy, and are suited to a very large range of products. There are diverse numbers of treatments under this treatment type, and a standard set of guidelines, as envisaged for this ISPM, would be very helpful for both new and existing exporters alike. Because there are many irradiation treatment schedules currently in existence, most foundation standards have been set, but streamlining needs to be applied for a more harmonious set of guidelines. Irradiation as a phytosanitary measure has the widest coverage of fresh commodities and pests over any other treatment, and therefore, there is an urgent need for this standard. Relevance to developing countries is demonstrated by its wide range of implementation. Asian and Pacific Plant Protection Commission (APPPC) RSPM refers to this standard for irradiation treatment facilities.

**Diagnostic protocols are subject to additional criteria. For proposals for DPs, please elaborate on the following criteria to help the future consideration of the subject proposed:**

N/A

### Draft Specification (No. 17)

**Proposed Title:**

Revision of ISPM 18 (*Guidelines for the use of irradiation as a phytosanitary measure*) (20XX-XXX).

**Reason for the standard** (justification as to why the standard is needed, some of this can be copied from the above submission):

ICPM-5 (2003) adopted ISPM 18:2003 *Guidelines for irradiation as a phytosanitary measure* in April 2003. The Technical Panel on Phytosanitary Treatments (TPPT) was established in 2004 and drafted ISPM 28 (*Phytosanitary treatments for regulated pests*). This standard presents in Annex 1 phytosanitary treatments evaluated and adopted by the CPM. CPM-3 (2007) adopted ISPM 28 in March 2007. In 2009, 2010 and 2011; CPM-5, CPM-6 and CPM-7 respectively adopted in total 14 irradiation treatments into ISPM 28:2007.

During the evaluation of these treatments TPPT gained considerable experience in the research methodology required to successfully develop irradiation treatments for adoption into ISPM 28:2007. Also subsequent to the adoption of ISPM 28:2007, it is now apparent that ISPM 18:2003 has a number of inconsistencies with ISPM 28:2007 that should be resolved. These include in ISPM 18:2003:

- Annex 1: (*Specific approved treatments*) that was intended to hold a list of approved irradiation treatments that are now included in ISPM 28:2007;
- Appendix 1: (*Estimated minimum absorbed doses for certain responses for selected pest groups*) that holds information is out-of-date;
- Appendix 2: (*Research Protocol*) that is out-of-date and should be reviewed to include the latest information from the work of the TPPT and the International Atomic Energy Agency (IAEA).

**Purpose** (explain what issue will be addressed and/or harmonized once this standard is put in place):

The purpose of this revision is to update and correct ambiguities and inconsistencies identified within the text of the standard, and to review and remove or substantially edit the annexes and appendices in line with current experience and other adopted ISPMs, with special regard to ISPM 28:2007.

**Scope** (this provides the boundaries or limits to what the standard should cover):

The scope, purpose, principles, and general format of ISPM 18:2003 should be maintained in the revised standard.

**Tasks for the expert drafting group** (this will help direct the work of the experts):

The expert drafting group should:

- (1) Review and revise the text of ISPM 18:2003 (including its annexes and appendices) to ensure consistency with other ISPMs and current best practices.
- (2) Ensure that all sections of the revised standard are consistent with each other, the IPPC, current ISPM drafting guidelines, and, where appropriate, other ISPMs.
- (3) Consider whether the standard could affect in a specific way (positively or negatively) the protection of biodiversity and the environment. If this is the case, the impact should be identified, addressed and clarified in the draft standard.
- (4) Consider implementation of the standard by contracting parties and identify potential operational and technical implementation issues. Provide information and possible recommendations on these issues to the SC.

**Expertise** (this will provide the basis for screening nominations):

This standard should be revised by the TPPT, with expertise as dictated by Specification for Technical Panels 3. The IAEA should be invited to nominate an expert to attend the relevant parts of the TPPT meeting(s).



**References** (Relevant ISPMs and national, regional or international standards on the same topic and any specific references that would be relevant during drafting):

ISPM 28:2007

TPPT meeting reports and treatment evaluation guidance material.

The IPPC, relevant ISPMs and other national, regional and international standards and agreements as may be applicable to the tasks, and discussion papers submitted in relation to this work.

CRP 2014 meeting outcomes.

**Literature review** (this section will provide a **summary of the topic** based on scientific and technical publications, including a referenced **listed of literature reviewed**. This will help provide the scientific basis for the content of the standard to be used by the selected experts during the development of the standard):

Hallman, G. J. 2012. Generic phytosanitary irradiation treatments. Rad. Physics Chem. 81: 861-866.

IAEA 2012. The Development of Generic Irradiation Doses for Quarantine Treatments. Report of the 3<sup>rd</sup> Research Coordination meeting Buenos Aires, Argentina, 15 – 19 October 2012: pp43.



**Feasibility of implementation at the global level (includes ease of implementation, technical complexity, capacity of NPPOs to implement, relevance for more than one region).**

Harmonized guidance on diversion from intended use should be no more technically complex or more difficult to implement than existing concept standards and should be globally relevant in that it would apply to all countries exporting commodities that can be vegetatively propagated and would apply to many importing countries.

**Clear identification of the problems that need to be resolved through the development of the standard.**

In the absence of harmonized guidance on how to account for diversion in a PRA, or appropriate strength of measures when PRA does not consider the diversion pathway, countries negotiate on a case-by-case basis often achieving less than optimal outcomes which can include: unjustified measures; ineffective measures; refusal to engage in mutually beneficial trade; protracted and costly trade disputes.

**Availability of, or possibility to collect, information in support of the proposed standard (e.g. scientific, historical, technical information, experience).**

Scientific, historical, technical information and experience are all readily available.

**Supporting criteria (Practical)**

- Feasibility of adopting the proposed standard within a reasonable time frame.
- Stage of development of the proposed standard (is a standard on the same topic already widely used by NPPOs, RPPOs or a relevant international organization).
- Availability of expertise needed to develop the proposed standard.

It should be feasible to adopt the proposed standard in a reasonable period of time. There is currently no NPPO or RPPO standard on diversion from intended use. The issue of intended use is mentioned in the Convention, and ISPMs 11, 12, 16 and 32

**Supporting criteria (Economic)**

- Estimated value of the plants protected.
- Estimated value of trade affected by the proposed standard (e.g. volume of trade, value of trade, the percentage of Gross Domestic Product of this trade) if appropriate.

*(Note: the data below may overstate trade affected by proposed standard somewhat because it includes all importing countries, not just those where diversion is more likely to occur).*

| Group         | Commodities (for consumption, not seed)              | 2011 Value Global Trade |
|---------------|--|-------------------------|
| Grains        | Millet, sorghum, barley, wheat, corn                 | \$49.8 billion USD      |
| Peas & Pulses | Peas, chickpeas, cowpeas, beans, pigeonpeas, lentils | \$7.9 billion USD       |
| Tubers        | Potatoes, sweet potatoes, yams, taro                 | \$7.5 billion USD       |
|               |  | \$65.2 billion USD      |

Source: Global Trade Atlas Database (qtis.com)

- Estimated value of new trade opportunities provided by the approval of the proposed standard.
- Potential benefits in terms of pest control or quarantine activities.

**Supporting criteria (Environmental)**

- Utility to reduce the potential negative environmental consequences of certain phytosanitary measures, for example reduction in global emissions for the protection of the ozone layer.
- Utility in the management of non indigenous species which are pests of plants (such as some invasive alien species).
- Contribution to the protection of the environment, through the protection of wild flora, and their habitats and ecosystems, and of agricultural biodiversity.

Harmonized guidance on diversion could prevent the entry and establishment of pests, pathogens, weeds on commodities intended for consumption that are diverted for planting by small farmers. Consumption tends to extinguish the pathway for establishment of pests, pathogens, and weeds while planting tends to disseminate pests and pathogens.

**Supporting criteria (Strategic)**

- **Extent of support for the proposed standard (e.g. one or more NPPOs or RPPOs have requested it, or one or more RPPOs have adopted a standard on the same topic).**  
NA
- **Frequency with which the issue addressed by the proposed standard emerges as a source of trade disruption (e.g. disputes or need for repeated bilateral discussions, number of times per year trade is disrupted).**  
Frequent trade disruption, ongoing disputes.
- **Relevance and utility to developing countries.**  
Very relevant and useful to both developed and developing countries.
- **Coverage (application to a wide range of countries/pests/commodities).**  
Wide range of countries/pests/commodities.
- **Complements other standards (e.g. potential for the standard to be used as part of a systems approach for one pest, complement treatments for other pests).**  
Complements other standards.
- **Foundation standards to address fundamental concepts (e.g. treatment efficacy, inspection methodology).**  
Diversion from intended use relates to fundamental concepts like PRA and appropriate strength of measures.
- **Expected standard longevity (e.g. future trade needs, suggested use of easily outdated technology or products).**  
Unlikely to become outdated because of new technologies.
- **Urgent need for the standard.**  
Pressing need for standard.

**Diagnostic protocols are subject to additional criteria. For proposals for DPs, please elaborate on the following criteria to help the future consideration of the subject proposed:**

NA

### Draft Specification (No. 18)

#### Proposed Title: Diversion from Intended Use

**Reason for the standard** (justification as to why the standard is needed, some of this can be copied from the above submission):

Diversion of commodities from their intended use to an unintended use, e.g. when commodities intended for consumption are used as seed for planting, is an important issue in agricultural trade that has implications for the establishment of pests and pathogens in an importing country and for the appropriate strength of plant health measures. Diversion typically occurs in countries where there is an inadequate supply of high quality or certified seed and with commodities that can be consumed or planted, e.g. grains, pulses, potatoes. Differing viewpoints on how to assess and manage the risk of diversion are the source of frequent problems in international trade.

Commodities that will be planted are generally a higher risk pathway for pest entry and establishment than commodities that will be consumed, because cultivation promotes pest survival and persistence while consumption tends to extinguish the pathway for pest introduction.

Phytosanitary measures are required to be technically justified by risk assessment and to be no stricter than necessary to protect against the assessed risk of pest entry and establishment. Commodity risk assessments and associated plant health measures are based on the **intended use** of a commodity. For example, tomatoes for consumption and tomato seed for planting would be considered two different intended uses requiring separate risk assessments and different plant health measures commensurate with assessed risk of each.

A fundamental problem with diversion arises when an importing country conducts a risk assessment for the intended use (eg, consumption) but wants to impose stricter import measures than are justified by that risk assessment to safeguard against the possibility that the commodity will be diverted to a higher risk use (eg, planting) after importation. Importing countries are typically unable to quantify the magnitude of diversion, estimate the risk associated with it, or propose measures based on assessed risk of diversion. Exporting countries tend to view diversion in the importing country as a problem that should be managed within the importing country and not by imposing unjustified phytosanitary measures in the exporting country or in transit.

Existing international standards do not provide sufficiently detailed guidance to help trading partners resolve issues related to potential diversion from intended use. There is guidance on pest risk and intended use, the risks associated with different categories of intended use, strength of measures and intended use; but there is no harmonized guidance that specifically addresses strength of measures when there is the potential for diversion from intended use.

In the absence of harmonized international guidance or risk assessments that properly account for risk of diversion, trading partners negotiate issues related to diversion on a case-by-case basis, often achieving less than optimal outcomes. These can include agreement to arbitrary, unjustified or ineffective plant health measures, refusal to engage in mutually beneficial trade, or protracted and costly trade disputes.

**Purpose** (explain what issue will be addressed and/or harmonized once this standard is put in place):

This standard will provide harmonized guidance, applicable to both importing and exporting countries, on how to appropriately account for the risk from diversion from intended use when applying phytosanitary measures

**Scope** (this provides the boundaries or limits to what the standard should cover):

- Will apply to commonly traded commodities capable of being consumed or vegetatively propagated and other cases where diversion from intended use has implications for the strength of phytosanitary measures
- Will apply to intentional (eg, mismanifesting) and unintentional diversion (eg, grain spillage)
- Will apply to all pathways where diversion from an intended to an unintended use may occur (e.g., consumption, planting, processing or others that may be identified by EWG).

**Tasks for the expert drafting group** (this will help direct the work of the experts):

1. Review adopted ISPMs and IPPC for guidance relevant to intended use and diversion from intended use
2. Review published literature, meeting reports, dispute documents and discussion papers dealing with diversion
3. Consider which types of commodities should be included in the standard. All commodities? All vegetatively propagatable commodities? [For example, EWG should determine if commodities like in-shell nuts, which may not produce true to type when planted because they were propagated by grafting, should be considered.]
4. Consider all potential types of diversion: consumption to planting (the typical case); processing to consumption (eg, citrus for juicing diverted to consumption), other examples identified by EWG.
5. Determine where this harmonized guidance on diversion would be most useful: new standard, annex to ISPM 32, revisions to ISPM 11, or other placement
6. Discuss intentional (eg, mismanifesting) versus unintentional diversion (eg, grain spillage) and provide guidance
7. Discuss diversion decisions made after importation (eg, commodities for juicing/processing used for consumption and vice-versa) and provide guidance
8. Provide guidance for importing countries to appropriately account for risk of diversion from intended use in PRA and in pest risk management decisions
  - a. Provide guidance for importing countries to characterize the scope and magnitude of diversion
  - b. Provide guidance on the nature and extent of information needed to technically justify phytosanitary measures that are based on the possibility of diversion.
  - c. Provide guidance for importing countries on appropriate strength of measures in situations where importing country is unable to characterize the scope and magnitude of diversion or account for diversion in PRA
  - d. Provide guidance to importing and exporting countries on where measures to manage the risk of diversion should be applied Exporting country? Importing country? Both?
9. Other?

**Expertise** (this will provide the basis for screening nominations):

- Plant health specialists and PRA managers with experience relating to commodities for consumption that can be vegetatively propagated and are commonly diverted eg, grains, pulses, potatoes
- Risk managers with experience relating to phytosanitary measures for grains, pulses, potatoes
- Plant health regulators from importing and exporting countries with experience in trade issues concerning diversion from intended use and understanding of relevant WTO/SPS, IPPC disciplines and principles
- Other?

**References** (Relevant ISPMs and national, regional or international standards on the same topic and any specific references that would be relevant during drafting):

## References

FAO-IPPC. Open-ended workshop on the international movement of grain. Vancouver, British Columbia, Canada: Food and Agriculture Organization of the United Nations, International Plant Protection Convention, December 6-8, 2011.

FAO. International Plant Protection Convention, Food and Agriculture Organization of the United Nations.

FAO. ISPM 11, Pest risk analysis for quarantine pests including analysis of environmental risks and living modified organisms, Food and Agriculture Organization of the United Nations.

FAO. ISPM 12, Phytosanitary certificates, Food and Agriculture Organization of the United Nations.

FAO. ISPM 16, Regulated non-quarantine pests: Concept and application, Food and Agriculture Organization of the United Nations.

FAO. ISPM 32, Categorization of commodities according to their pest risk. Food and Agriculture Organization of the

United.

**Literature review** (this section will provide a **summary of the topic** based on scientific and technical publications, including a referenced **listed of literature reviewed**. This will help provide the scientific basis for the content of the standard to be used by the selected experts during the development of the standard):

FAO-IPPC. Open-ended workshop on the international movement of grain. Vancouver, British Columbia, Canada: Food and Agriculture Organization of the United Nations, International Plant Protection Convention, December 6-8, 2011.

Powerpoint by Jens Unger: Relevance of existing ISPMs to the International Movement of Grain, presented at December 2011 Open-ended working group on the international movement of grain in Ottawa, Canada. Link (under agenda item 22): <https://www.ippc.int/core-activities/standard-settings/open-ended-workshop-international-movement-of-grain>

NAPPO. Final report: Mediation panel for potato trade between Mexico and the United States, North American Plant Protection Organization, September 19, 2011.

Fowler, Glenn, et al, 2013, Modeling Phytosanitary Risk of Unintended Commodity Use: The Example of U.S. Potato Exports to Mexico (draft submitted for publication August 2013).

**Attachment 16: Submission No. 19****Title (type of topic):** Commodity classes (Appendix to ISPM 12)**Proposed by/ supported by:** EPPO/EU

| <b>Submission form for IPPC standard setting work programme topics</b>   |  |   |
|--|--|---|
| <b>Proposed by:</b> EPPO   |  |   |
| <b>Contact:</b> (Contact information of an individual able to clarify issues relating to this submission)<br>Name: Jean PERCHET<br>Position and organization: Scientific officer, EPPO<br>Mailing address: 21 boulevard Richard Lenoir 75011 PARIS France<br>Phone: + 33 (0) 1 45 20 77 94 Fax: + 33 (0) 1 70 76 65 47<br>E-mail: <a href="mailto:jp@eppo.int">jp@eppo.int</a> |  |   |
| <b>Type of topic:</b> (Choose one box only)  |  |   |
| <b>A. New ISPM:</b><br><input type="checkbox"/> Concept<br><input type="checkbox"/> Pest specific<br><input type="checkbox"/> Commodity specific<br><input type="checkbox"/> Reference   | <b>B. New component to an existing ISPM:</b><br><input type="checkbox"/> Supplement<br><input type="checkbox"/> Annex<br><input checked="" type="checkbox"/> Appendix<br><input type="checkbox"/> Technical Panel (technical area)<br><input type="checkbox"/> DP: Diagnostic protocol (subject)<br><input type="checkbox"/> PT: Phytosanitary treatment (topic)<br><input type="checkbox"/> Glossary term (subject) | <b>C. Revision/Amendment of:</b><br><input type="checkbox"/> ISPM<br><input type="checkbox"/> Supplement<br><input type="checkbox"/> Annex<br><input type="checkbox"/> Appendix<br><input type="checkbox"/> Glossary term |
| <b>Proposed title of new ISPM or component:</b> <b>or</b> <b>Title of document to be revised or amended:</b>   |  |   |
| COMMODITY CLASSES (Appendix to ISPM 12)  |  |   |
| <b>Summary justification for the proposal (2 lines max.):</b>  |  |   |
| To ensure that commodity classes are clearly presented and described.  |  |   |
| <b>Submissions should address the applicable criteria for justification of the proposal (as listed below). Where possible, information in support of the justification and that may assist in the prioritization should be indicated.</b>  |  |   |
| <b>All core criteria must be addressed; supporting criteria should be addressed if applicable</b>  |  |   |
| <b>Core criteria:</b>  |  |   |
| <b>Contribution to the purpose of the IPPC as described in Article I.</b>  |  |   |
| Yes – common and effective action to prevent the spread and introduction of pests of plants and plant products   |  |   |
| <b>Feasibility of implementation at the global level (includes ease of implementation, technical complexity, capacity of NPPOs to implement, relevance for more than one region).</b> Yes- the proposed commodity classes should be straightforward for all countries to follow, although will require some time to complete implementation                                    |  |   |
| <b>Clear identification of the problems that need to be resolved through the development of the standard.</b>  |  |   |
| Commodity classes differs in-between countries and that does not help to facilitate international trade. It would also make it easier to have the same commodity classes for information systems to connect them and to provide appropriate documentation.   |  |   |
| <b>Availability of, or possibility to collect, information in support of the proposed standard (e.g. scientific, historical, technical information, experience).</b>   |  |   |
| Ideas from development of information about electronic phytosanitary certificate, results from ePhyto group-<br><a href="http://ephyto.ippc.int/Commodities/">http://ephyto.ippc.int/Commodities/</a> and countries and regions experience.  |  |   |
| <b>Supporting criteria (Practical)</b>   |  |   |
| ➤ <b>Feasibility of adopting the proposed standard within a reasonable time frame.</b>   |  |   |
| It should be straightforward to produce a harmonised commodity classes as the information exists, it is a matter of  |  |   |



deciding the best options and have agreement about that.

- **Stage of development of the proposed standard (is a standard on the same topic already widely used by NPPOs, RPPOs or a relevant international organization).**

Some contracting parties have good systems in place, ePhyto group internationally has worked with this question

- **Availability of expertise needed to develop the propose standard.**

Some contracting parties have good expertise and experience to build their own systems.

#### **Supporting criteria (Economic)**

- **Estimated value of the plants protected.**

All trade in plants and plant products and other regulated objects

- **Estimated value of trade affected by the proposed standard (e.g. volume of trade, value of trade, the percentage of Gross Domestic Product of this trade) if appropriate.**

All trade in plants and plant products and other regulated objects

- **Estimated value of new trade opportunities provided by the approval of the proposed standard.**

Harmonised information systems, easier communication between countries, the same understanding.

Ability to build electronic certification and use electronic certificates in the future more widely.

Easier administrative work and documentation filling.

- **Potential benefits in terms of pest control or quarantine activities.**

Clear description of commodity classes should mean that specific import requirements could be expressed more clearly for specific commodity classes and discrepancies could be reduced, nonconformity could be avoided and therefore trade will be easier, better and safer

It may also help in pest control and in quarantine area if commodity specific standards will be developed

#### **Supporting criteria (Environmental)**

- **Utility to reduce the potential negative environmental consequences of certain phytosanitary measures, for example reduction in global emissions for the protection of the ozone layer.**

- **Utility in the management of non indigenous species which are pests of plants (such as some invasive alien species).**

- **Contribution to the protection of the environment, through the protection of wild flora, and their habitats and ecosystems, and of agricultural biodiversity.**

#### **Supporting criteria (Strategic)**

- **Extent of support for the proposed standard (e.g. one or more NPPOs or RPPOs have requested it, or one or more RPPOs have adopted a standard on the same topic).**

Proposed and supported by EU and EPPO countries

- **Frequency with which the issue addressed by the proposed standard emerges as a source of trade disruption (e.g. disputes or need for repeated bilateral discussions, number of times per year trade is disrupted).**

Very frequent

- **Relevance and utility to developing countries.**

Very relevant

- **Coverage (application to a wide range of countries/pests/commodities).**

All trading countries

- **Complements other standards (e.g. potential for the standard to be used as part of a systems approach for one pest, complement treatments for other pests).**

Complements ISPMs 12

It may also help in the future to develop commodity specific standards

- **Foundation standards to address fundamental concepts (e.g. treatment efficacy, inspection methodology).**

Phytosanitary certificates and certification system improvements

- **Expected standard longevity (e.g. future trade needs, suggested use of easily outdated technology or products).**

Should serve for many years

- **Urgent need for the standard.**

Yes – for transparency and easier work, easier communication

| <b>Draft Specification (No. 19)</b>   |
|---|
| <p><b>Proposed Title:</b></p> <p>COMMODITY CLASSES (Appendix to ISPM 12)</p>  |
| <p><b>Reason for the standard</b> (justification as to why the standard is needed, some of this can be copied from the above submission):</p> <p>The IPPC, in Article I 1. requires contracting parties do appropriate tasks to provide common and effective actions.</p> <p>The IPPC, in Article V requires contracting parties to make arrangements for phytosanitary certification and explains that certificates should be completed and issued taking into account relevant international standards. ISPM 12 provides requirements and guidelines for the preparation and issuance of phytosanitary certificates. It does not provide guidelines for commodity classes yet. Guidelines are needed as commodity classes should be harmonized worldwide for international trade and internal use, f.e., databases, monitoring, controls et cetera. It is important to express and understand in the same way at least biggest commodity classes. Such standard would be useful afterwards for commodity specific standards and for paper and electronic certificates (in their issuance process), for specific standards for phytosanitary treatments and for specific commodity standards. In practice, many countries have developed their own systems and their frequently used commodity groups.</p> <p>Given the complexities of wide usage of commodity classes, it is often difficult for contracting parties to communicate if there are different understanding and name for specific commodities. In order to facilitate safe trade, increase transparency and improve efficiency, there is a need for a more standardized commodity classes.</p> <p>This should help facilitate and ensure safe trade and reduce the costs of administration, inspection etc. because a clear understanding of another country's commodity classes will make easier control and administration of documents. It will save time and money. It will reduce time and money spent due to a lack of understanding. Standard will help to reduce risk of pests regulated by the importing country travelling with the consignment. It will also reduce the need for bilateral contacts between the importing and exporting countries for clarification of their commodity classes and help overcome language barriers through the use of a standard format and consistent use of commodity classes.</p> |
| <p><b>Purpose</b> (explain what issue will be addressed and/or harmonized once this standard is put in place):</p> <p>The purpose of this standard is to provide standardized commodity classes that could be used for domestic and international purposes.</p>   |
| <p><b>Scope</b> (this provides the boundaries or limits to what the standard should cover):</p> <p>The scope of the standard will be limited to the provision of commodity classes that should be used for certification.</p>   |
| <p><b>Tasks for the expert drafting group</b> (this will help direct the work of the experts):</p> <p>The Working group should</p> <ol style="list-style-type: none"> <li>1. consider commodity classes, explain, what they include and show examples</li> <li>2. consider the plants, plant products and regulated articles that should be covered under commodity classes groups (f.e., in 3 levels as suggested previously by EPPO).</li> <li>3. consider which other commodity classes may need a harmonized definition</li> <li>4. consider ideas from development of information about electronic phytosanitary certificate throughout ISPM 12 development process in previous years, results from ePhyto group- <a href="http://ephyto.ippc.int/Commodities/">http://ephyto.ippc.int/Commodities/</a> and countries and regions experience</li> <li>5. consider ways for further consultation with, and involvement of, stakeholders on the subject of this standard during the development of this ISPM, as well as identifying key stakeholders whose specific comments should be sought in relation to the development of this standard, and provide recommendations on both these areas to the Standards Committee.</li> </ol>   |

6. consider whether the new standard could affect in a specific way (positively or negatively) the protection of biodiversity and the environment, and if so, the impact should be identified, addressed and clarified in the draft standard.
7. consider implementation of the standard by contracting parties and identify potential operational and technical implementation issues. Provide information and possible recommendations on these issues to the SC

**Expertise** (this will provide the basis for screening nominations):

A working group of five to seven phytosanitary experts with extensive knowledge in one or more of the following areas: development of phytosanitary certification system and work with commodity classes related with import export in NPPO

**References** (Relevant ISPMs and national, regional or international standards on the same topic and any specific references that would be relevant during drafting):

[http://ephyto.ippc.int/Commodities/  
regional\\_national\\_experience\\_given\\_in\\_previous\\_years\\_when\\_ISPM\\_12\\_was\\_amended](http://ephyto.ippc.int/Commodities/regional_national_experience_given_in_previous_years_when_ISPM_12_was_amended)

**Literature review** (this section will provide a **summary of the topic** based on scientific and technical publications, including a referenced **list of literature reviewed**. This will help provide the scientific basis for the content of the standard to be used by the selected experts during the development of the standard):

There is no specific scientific or technical literature on this topic, but suggestions have been given in previous CPM meeting and before. There was suggestion to create a group that could develop such commodity groups by taking into account existing experience and information.

Specific starting ideas has been created - <http://ephyto.ippc.int/Commodities/>



**Supporting criteria (Practical)**

- **Feasibility of adopting the proposed standard within a reasonable time frame.**

It should be straightforward to produce a harmonised template for publishing phytosanitary import requirements as the information exists, it is a matter of deciding how best to display it

- **Stage of development of the proposed standard (is a standard on the same topic already widely used by NPPOs, RPPOs or a relevant international organization).**

Some contracting parties have good systems in place

- **Availability of expertise needed to develop the propose standard.**

Some contracting parties already produce summaries of import requirements so experts will be available who would be able to agree a common (harmonised) format for publishing import regulation and requirements

**Supporting criteria (Economic)**

- **Estimated value of the plants protected.**

\$?? billion

- **Estimated value of trade affected by the proposed standard (e.g. volume of trade, value of trade, the percentage of Gross Domestic Product of this trade) if appropriate.**

All trade in plants and plant products

- **Estimated value of new trade opportunities provided by the approval of the proposed standard.**

Difficult to estimate but by clearly describing their import requirements, contracting parties will ensure that decisions by potential exporters are more straightforward, decrease the amount of time needed by officials in exporting countries to clarify import requirements prior to issuing phytosanitary certificates and potentially reduce the numbers of non-compliances.

For the importing country, the exercise may reveal gaps and inconsistencies in their legislation, while for all countries standardising presentation of import requirements would facilitate comparisons between different countries' requirements, thus leading to more harmonisation, acceptance of equivalence, etc

- **Potential benefits in terms of pest control or quarantine activities.**

Clear description of import requirements should mean that they are more likely to be met and therefore trade will be safer

**Supporting criteria (Environmental)**

- **Utility to reduce the potential negative environmental consequences of certain phytosanitary measures, for example reduction in global emissions for the protection of the ozone layer.**
- **Utility in the management of non indigenous species which are pests of plants (such as some invasive alien species).**
- **Contribution to the protection of the environment, through the protection of wild flora, and their habitats and ecosystems, and of agricultural biodiversity.**

**Supporting criteria (Strategic)**

- **Extent of support for the proposed standard (e.g. one or more NPPOs or RPPOs have requested it, or one or more RPPOs have adopted a standard on the same topic).**

Proposed and supported by EU and EPPO countries

- **Frequency with which the issue addressed by the proposed standard emerges as a source of trade disruption (e.g. disputes or need for repeated bilateral discussions, number of times per year trade is disrupted).**

Very frequent

- **Relevance and utility to developing countries.**

Very relevant

- **Coverage (application to a wide range of countries/pests/commodities).**

All trading countries

- **Complements other standards (e.g. potential for the standard to be used as part of a systems approach for one pest, complement treatments for other pests).**

Complements ISPMs 19 & 20

- **Foundation standards to address fundamental concepts (e.g. treatment efficacy, inspection methodology).**
- **Expected standard longevity (e.g. future trade needs, suggested use of easily outdated technology or products).**

Should serve for many years

- **Urgent need for the standard.**

Yes – for transparency

## Draft Specification (No. 20)

### Proposed Title:

DESCRIPTION OF IMPORT REQUIREMENTS (Annex to ISPM 20)

**Reason for the standard** (justification as to why the standard is needed, some of this can be copied from the above submission):

The IPPC, in Article VII2b requires contracting parties to publish and transmit phytosanitary requirements, restrictions and prohibitions to any contracting party or parties that they believe may be directly affected by such measures. ISPM 20 provides guidance on the operation of an import regulatory system, but does not provide any indication of the way in which phytosanitary import requirements should be communicated to affected contracting parties. In practice, contracting parties have been encouraged to post details about their import requirements on the international phytosanitary portal. Many countries achieve this by including links to their legislation or other requirements.

Given the complexities of legislation it is often difficult for potential exporters or exporting contracting parties to understand the legislation and the plant health requirements for specific plants, plant products or other regulated articles. In order to facilitate safe trade, increase transparency and improve efficiency, there is a need for a more standardized format for importing countries to communicate their import requirements, for example using templates for import requirements for specific commodities or commodity classes.

This should help facilitate and ensure safe trade and reduce the costs of administration, inspection etc because a clear understanding of another country's import requirements will help ensure that the exporting country can respect those requirements, thus reducing the risk of pests regulated by the importing country travelling with the consignment. It will also reduce the need for bilateral contacts between the importing and exporting countries for clarification of their requirements and help overcome language barriers through the use of a standard format and consistent use of sections of the template.

**Purpose** (explain what issue will be addressed and/or harmonized once this standard is put in place):

The purpose of this standard is to provide templates for use by importing countries to show in a standardized format the import requirements for specific commodities.

**Scope** (this provides the boundaries or limits to what the standard should cover):

The scope of the standard will be limited to the provision of templates that should be used to summarise the general phytosanitary import requirements and indicate specific phytosanitary import requirements for categories of plants, plant products and other regulated articles, using the IPPC commodity classes.

**Tasks for the expert drafting group** (this will help direct the work of the experts):

The Working group should

1. consider examples of import requirements that are notified via the IPP or elsewhere and examples of summaries of import requirements produced by NPPOs and RPPOs
2. recommend the minimum requirements that should be included in templates for summarising phytosanitary import requirements
3. consider the plants, plant products and regulated articles that should be covered by templates based on IPPC commodity classes, for example plants for planting, seed, grain fruit and vegetables, wood. Consider whether there are particular commodities of intended uses that would require specific templates, for example potatoes or import of small quantities for research or plant breeding.
4. recommend the optimum means for the requirements to be notified and presented, using standardised templates
5. consider the possibility of designing a template for summarizing phytosanitary requirements electronically, to be available via the IPP.
6. consider ways for further consultation with, and involvement of, stakeholders on the subject of this standard during the development of this ISPM, as well as identifying key stakeholders whose specific comments should be sought in relation to the development of this standard, and provide



|  |
|--|
| <p>recommendations on both these areas to the Standards Committee.</p> <p>7. consider whether the new standard could affect in a specific way (positively or negatively) the protection of biodiversity and the environment, and if so, the impact should be identified, addressed and clarified in the draft standard.</p> <p>8. consider implementation of the standard by contracting parties and identify potential operational and technical implementation issues. Provide information and possible recommendations on these issues to the SC</p>  |
| <p><b>Expertise</b> (this will provide the basis for screening nominations):</p> <p>A working group of five to seven phytosanitary experts with extensive knowledge in one or more of the following areas: development of phytosanitary import requirements or summarising import requirements for use by an NPPO or RPPO</p>  |
| <p><b>References</b> (Relevant ISPMs and national, regional or international standards on the same topic and any specific references that would be relevant during drafting):</p>  |
| <p><b>Literature review</b> (this section will provide a <b>summary of the topic</b> based on scientific and technical publications, including a referenced <b>list of literature reviewed</b>. This will help provide the scientific basis for the content of the standard to be used by the selected experts during the development of the standard):</p> <p>There is no specific scientific or technical literature on this topic, but the summary below provides some background to the issue and the potential benefits of adopting a harmonized approach to notifying countries of phytosanitary import requirements.</p> <p>Article VII2b of the IPPC requires contracting parties to publish and transmit phytosanitary requirements, restrictions and prohibitions to any contracting party or parties that they believe may be directly affected by such measures. Countries have been encouraged to post details about their import requirements on the international phytosanitary portal (<a href="http://www.ippc.int">www.ippc.int</a>) and currently many contracting parties achieve this by including links to their legislation or other requirements. However, a simple search through the links on the IPP shows that it is not easy to determine the requirements for export of commodities to a large number of countries.</p> <p>ISPM 20 provides guidance on the operation of an import regulatory system, but does not provide any indication of the way in which phytosanitary import requirements should be communicated to affected contracting parties.</p> <p>Many countries have attempted to summarise the phytosanitary import requirements of countries to which plants, plant products and other regulated articles are exported. For example, the United Kingdom had a SOCPHIR (summary of overseas countries' plant health import requirements) team from 1980s to 2004 and some summary requirements are still produced for export of potatoes (<a href="http://www.scotland.gov.uk/Topics/farmingrural/Agriculture/plant/18273/potatoexpcnds">http://www.scotland.gov.uk/Topics/farmingrural/Agriculture/plant/18273/potatoexpcnds</a>). EPPO also produced summaries of countries' import requirements in the past. This was a complex and resource intensive task and, due to resource constraints, in most countries in Europe this work has now ceased. The task was hindered by the difficulty in getting access to up to date phytosanitary regulations and in some cases interpretation of the requirements. In addition, many countries publish overarching legislation, but have an additional step by requiring import permits, which may specify additional requirements. The United Kingdom is currently developing an electronic database listing the 3<sup>rd</sup> country import and testing requirements for seed for sowing.</p> <p>This complexity can make it difficult for exporters and NPPOs of exporting countries to determine whether material can be traded with another country and whether the import requirements are met. The aim of the proposed standard is therefore to increase transparency of requirements by ensuring that they are set out in a harmonised format. This will help exporters and NPPOs to understand and comply with requirements. It should also aid efficiency, for example for exporters when preparing material for export, and improve planning and timing of NPPO inspections. Providing import requirements in a common format may also reduce the number of interceptions of pests and non-compliances.</p> <p>Many contracting parties may consider that the proposal to require import requirements to be published on the IPP in a standardised format is an increase the obligations on contracting parties. However, it is proposed that should be added as a requirement for gradually implementation, rather than a mandatory requirement once the standard is adopted. It may be appropriate for there to be a discussion on this approach at CPM when</p> |

this topic is added to the list of topics for standards.

The expert working group (EWG) will need to determine the minimum requirements for templates for publishing import requirements, for example the fields to include and the amount of detail. This should be done by reviewing examples of current best practice. The EWG will also need to consider whether different categories of template for different commodity classes should be developed or whether a standardised template can be produced. In addition, it may be appropriate to consider whether there should be specific formats for specific material or specific uses such as potatoes or imports for research or plant breeding.

## **Attachment 18: Submission No. 27 and No. 28**

### **Title (type of topic):**

27. Deletion of: Surveillance for citrus canker (*Xanthomonas axonopodis* pv. *citri*) (2002-001)

28. Deletion of: Systems approach for management of citrus canker (*Xanthomonas axonopodis* pv. *citri*) (2003-001)

**Proposed by/ supported by:** USA

### **Position by USA:**

The United States proposes removing the following topics from the List of topics for IPPC standards:

- Surveillance for citrus canker (*Xanthomonas axonopodis* pv. *citri*) (2002-001)
- Systems approach for management of citrus canker (*Xanthomonas axonopodis* pv. *citri*) (2003-001)

2003-001 has been on hold since 2006 because of lack of consensus on technical issues, and 2002-001 has been on hold since 2006, awaiting completion of 2003-001. In addition, these two topics have been on the standard setting work program since 2002 and 2003, respectively, have been assigned the lowest priority (4), and have no stewards assigned to them.

## **Attachment 19: Submission No. 29 and No. 30**

### **Title (type of topic):**

29. Eliminate all treatment topics from the *List of topics of IPPC standards* (LOT)

30. Eliminate the topic on Soil and growing media in association with plants (2009-006) from the LOT

### **Proposed by/ supported by: TPPT**

### **Position by TPPT:**

The IPPC Secretariat manages the work programme for new or revised standards using the *List of topics for IPPC standards*. Items on the list are categorized as technical areas, topics or subjects. The Technical Panel on Phytosanitary Treatments (TPPT) is considered a technical area and there are currently four treatment topic categories (irradiation, fruit flies, soil and growing media, and wood packaging material). All treatment schedules (known as subjects) on which the TPPT may work must fit under one of these four categories, or it is rejected by the panel.

In the past, it was thought that organizing the treatments in such a manner would focus the work of the panel and ensure that all treatment schedules submitted to the Secretariat would be covered under ISPM 28 and the IPPC. With the exception of irradiation, the existing topics are too specific and very narrow in scope compared to the wide range of pests limiting trade, diverse commodities exported and imported, and variety of treatment methods that could be considered. For example, there are many lepidopterous pests for which treatments are needed that could be considered. Other types of treatments include: heat, controlled atmosphere/temperature treatment systems, use of dips or dusts, sprays, and fumigants. In addition, treatments are needed for means of conveyance.

As a result of these limitations, there have been low numbers of treatments submitted to the Secretariat in response to calls for treatments. In addition, there are treatments being used in international trade that cannot be submitted because they do not fall under the four topic categories for treatments. Eliminating treatment topics could expand the number of treatments submitted for review and, in turn, broaden their use among NPPOs to mitigate pest risk effectively.

It was noted that the panel has not received any submission data for soil and growing media treatments since the topic has been added to the List of topics for IPPC standards. The TPPT noted that all soil and growing media treatments approved at the national level describe 100% sterilization. Therefore, it is not necessary to evaluate soil and growing media treatments against the requirements outlined in ISPM 28:2007. The panel also noted technical issues with meeting ISPM 28:2007 requirements given lack of definition of pests in soil and an understanding of efficacy needs.

The panel discussed whether treatment schedules or lists of existing treatments could be developed as an appendix to the draft ISPM *on Soil and growing media movement in international trade* (XXXX-XXX). It was also suggested that the soil and growing media draft ISPM could include sterilising treatments approved under other standards/bodies (e.g. OIE, medical, health).

It is proposed that if the topic categories are eliminated all types of phytosanitary treatment schedules could be submitted during a call for treatments. The TPPT would evaluate each submission to determine whether the treatment fits the criteria of ISPM 28, the IPPC, etc. The TPPT would then decide whether to recommend to the SC that the treatment be placed on the *List of topics*.

It is for these reasons that the panel agreed that all treatment topics should be eliminated from the *List of topics* topic or at least Soil and growing media in association with plants (2009-006) removed from the List of topics for IPPC standards.

### **The SC is invited to:**

recommend elimination all treatment topics from the *List of topics* or at least Soil and growing media in association with plants (2009-006) to be removed from the *List of topics*.



**Availability of, or possibility to collect, information in support of the proposed standard (e.g. scientific, historical, technical information, experience).**

Considerable research has been done and commercial application has taken place. The information and expertise are available.

**Supporting criteria (Practical)**

- Feasibility of adopting the proposed standard within a reasonable time frame.
- Stage of development of the proposed standard (is a standard on the same topic already widely used by NPPOs, RPPOs or a relevant international organization).
- Availability of expertise needed to develop the proposed standard.

Adoption is expected to occur at about the same pace as most other treatments.

There are standards developed by other NPPOs/RPPOs

Expertise exists in a various countries such as Canada, USA, Japan, New Zealand, Australia, and others.

**Supporting criteria (Economic)**

- Estimated value of the plants protected.
- Estimated value of trade affected by the proposed standard (e.g. volume of trade, value of trade, the percentage of Gross Domestic Product of this trade) if appropriate.
- Estimated value of new trade opportunities provided by the approval of the proposed standard.
- Potential benefits in terms of pest control or quarantine activities.

Plants for planting includes plants and vegetative parts that are for or capable of propagation, including buds, bulbs, corms, cuttings, layers, pollen, scions, seeds, tissue, tubers, and like structures. Plants for planting must be regulated to prevent the introduction of pests because they might be destructive enough to start a pest outbreak that can cause millions of dollars of damage to crops, trees, flowers, or lawns.

**Supporting criteria (Environmental)**

- Utility to reduce the potential negative environmental consequences of certain phytosanitary measures, for example reduction in global emissions for the protection of the ozone layer.
- Utility in the management of non indigenous species which are pests of plants (such as some invasive alien species).
- Contribution to the protection of the environment, through the protection of wild flora, and their habitats and ecosystems, and of agricultural biodiversity.

The most frequently used phytosanitary treatments able to control pest associated with plants for planting is methyl bromide fumigation, but other alternatives exist such as hot water dips, phosphine and chemicals. The destructiveness of a plant that becomes invasive can ruin recreational areas, increase the price and reduce the quality of food, lower property values, cause the extinction of plant species and consequently do away with the aesthetic, ecological, educational, historical, recreational, commercial, and scientific value of our world.

**Supporting criteria (Strategic)**

- Extent of support for the proposed standard (e.g. one or more NPPOs or RPPOs have requested it, or one or more RPPOs have adopted a standard on the same topic).
- Frequency with which the issue addressed by the proposed standard emerges as a source of trade disruption (e.g. disputes or need for repeated bilateral discussions, number of times per year trade is disrupted).
- Relevance and utility to developing countries.
- Coverage (application to a wide range of countries/pests/commodities).
- Complements other standards (e.g. potential for the standard to be used as part of a systems approach for one pest, complement treatments for other pests).
- Foundation standards to address fundamental concepts (e.g. treatment efficacy, inspection methodology).
- Expected standard longevity (e.g. future trade needs, suggested use of easily outdated technology or products).
- Urgent need for the standard.

Treatments and regulations for plants for planting are already in widespread use. These techniques are easy to apply and to assess for treatment efficacy, and are suited to a very large range of products. There are diverse numbers of treatments under this topic, and a standard set of guidelines, as envisaged for this ISPM, would be very helpful for both new and existing exporters alike. Because there are many regulations and treatment schedules for plants for planting currently in existence, most foundation standards have been set, but streamlining needs to be applied for a more harmonious set of guidelines.

In addition, ISPM XX Plants for planting was adopted by CPM-7 (2012), so there should be support from IPPC members for this treatment topic.





**Clear identification of the problems that need to be resolved through the development of the standard.**

Treatments for pests other than fruit flies would come under ISPM 28. These treatments are needed to eliminate insects, nematodes, molluscs, mites, spiders and pathogens that potentially could spread and become established if moved inadvertently. The lack of treatment alternatives imposes limits on the safe movement of many types of commodities. Pests other than fruit flies directly attack many different types of commodities. They also can be contaminants not directly infesting the commodity. Such treatments could be used to decontaminate such shipments.

**Availability of, or possibility to collect, information in support of the proposed standard (e.g. scientific, historical, technical information, experience).**

A number of treatments currently are in use by NPPOs and RPPOs to control pests other than fruit flies so there already is a body of scientific, technical information and expertise readily available. This information could serve as the basis for development of new treatments where such data or information is lacking. Additional research will be needed, particularly where there is no scientific literature or data for a given pest species or the type of commodity or product.

**Supporting criteria (Practical)**

- Feasibility of adopting the proposed standard within a reasonable time frame.
- Stage of development of the proposed standard (is a standard on the same topic already widely used by NPPOs, RPPOs or a relevant international organization).
- Availability of expertise needed to develop the proposed standard.

A number of treatments for pests other than fruit flies already are in use by NPPOs and RPPOs to meet entry requirements imposed by contracting parties. This body of scientific and technical information, as well as expertise, makes it feasible to begin reviewing existing treatments for suitability in eliminating or reducing pest risk to an acceptable level to allow safe movement.

**Supporting criteria (Economic)**

- Estimated value of the plants protected.
- Estimated value of trade affected by the proposed standard (e.g. volume of trade, value of trade, the percentage of Gross Domestic Product of this trade) if appropriate.
- Estimated value of new trade opportunities provided by the approval of the proposed standard.
- Potential benefits in terms of pest control or quarantine activities.

The lack of treatment alternatives for pests other than fruit flies severely limits trade among contracting parties. Treatments for pests other than fruit flies would allow for the safe movement of a wide variety of commodities in trade, thereby increasing trade opportunities on a global level. Such treatments also would generate new opportunities for those applying such treatments. The potential benefit of treatments for pests other than fruit flies would eliminate or reduce pest spread while allowing for safe movement in trade.

**Supporting criteria (Environmental)**

- Utility to reduce the potential negative environmental consequences of certain phytosanitary measures, for example reduction in global emissions for the protection of the ozone layer.
- Utility in the management of non indigenous species which are pests of plants (such as some invasive alien species).
- Contribution to the protection of the environment, through the protection of wild flora, and their habitats and ecosystems, and of agricultural biodiversity.

Adoption of new treatments for pests other than fruit flies by NPPOs: 1.) may reduce dependency upon the use of methyl bromide and the emissions that could negatively affect the ozone layer, 2.) would allow for safe movement in trade without the risk of spreading pests, 3.) would provide agricultural producers, marketers, shippers, importers and retailers of agricultural commodities products with various treatment alternatives to eliminate or reduce the potential for spreading plant pests. NPPOs and RPPOs would benefit by having a variety of treatment options that could be used to eliminate or reduce pest risk that conform to the phytosanitary requirements of other contracting parties importing such goods.

**Supporting criteria (Strategic)**

- Extent of support for the proposed standard (e.g. one or more NPPOs or RPPOs have requested it, or one or more RPPOs have adopted a standard on the same topic).
- Frequency with which the issue addressed by the proposed standard emerges as a source of trade disruption (e.g. disputes or need for repeated bilateral discussions, number of times per year trade is disrupted).
- Relevance and utility to developing countries.
- Coverage (application to a wide range of countries/pests/commodities).
- Complements other standards (e.g. potential for the standard to be used as part of a systems approach for one pest, complement treatments for other pests).
- Foundation standards to address fundamental concepts (e.g. treatment efficacy, inspection methodology).
- Expected standard longevity (e.g. future trade needs, suggested use of easily outdated technology or products).
- Urgent need for the standard.

Treatments for pests other than fruit flies are already in widespread use. These techniques are easy to apply and to assess for treatment efficacy, and are suited to a very large range of products. There are diverse numbers of treatments under this topic, and a standard set of guidelines, as envisaged for this ISPM, would be very helpful for both new and existing exporters alike. Because there are many treatment schedules for pests other than fruit flies currently in existence, most foundation standards have been set, but streamlining needs to be applied for a more harmonious set of guidelines.



**Clear identification of the problems that need to be resolved through the development of the standard.**

These treatments are needed to eliminate wood-boring insects, nematodes and pathogens that potentially could destroy trees if moved inadvertently with untreated wood and wood products. Shipments of wood and wood products also can harbour other plant pests and/or contaminants not directly infesting the commodity. Such treatments could be used to decontaminate the shipment.

**Availability of, or possibility to collect, information in support of the proposed standard (e.g. scientific, historical, technical information, experience).**

A number of wood treatments currently are in use by NPPOs and RPPOs so there already is a body of scientific, technical information and expertise readily available. This information could serve as the basis for development of new treatments where such data or information is lacking. Additional research will be needed particularly where there is no scientific literature or data for a given pest species or the type of wood commodity or product.

**Supporting criteria (Practical)**

- Feasibility of adopting the proposed standard within a reasonable time frame.
- Stage of development of the proposed standard (is a standard on the same topic already widely used by NPPOs, RPPOs or a relevant international organization).
- Availability of expertise needed to develop the proposed standard.

A number of wood treatments already are in use by NPPOs and RPPOs to meet entry requirements imposed by contracting parties. This body of scientific, technical information and expertise makes it feasible to begin reviewing existing treatments for suitability in eliminating or reducing pest risk to an acceptable level to allow safe movement.

**Supporting criteria (Economic)**

- Estimated value of the plants protected.
- Estimated value of trade affected by the proposed standard (e.g. volume of trade, value of trade, the percentage of Gross Domestic Product of this trade) if appropriate.
- Estimated value of new trade opportunities provided by the approval of the proposed standard.
- Potential benefits in terms of pest control or quarantine activities.

The economic value as well as environmental value of the world's forest is incalculable. Timber harvested for use totals hundreds of billions of dollars per year. Treatments for wood and wood products would allow for the safe movement of such commodities in trade thereby protecting forests and natural stands of timber on a global level. Such treatments also would generate new trade opportunities both for those harvesting wood and wood products as well as those applying such treatments. The potential benefit of treatments for wood and wood products would eliminate or reduce pest spread while allowing for safe movement in trade.

**Supporting criteria (Environmental)**

- Utility to reduce the potential negative environmental consequences of certain phytosanitary measures, for example reduction in global emissions for the protection of the ozone layer.
- Utility in the management of non indigenous species which are pests of plants (such as some invasive alien species).
- Contribution to the protection of the environment, through the protection of wild flora, and their habitats and ecosystems, and of agricultural biodiversity.

Adoption of new treatments for wood and wood products by NPPOs: 1.) may reduce dependency upon the use of methyl bromide and the emissions that could negatively affect the ozone layer, 2.) would allow for safe movement in trade without the risk of spreading pests, 3.) would provide agricultural producers, marketers, shippers, importers and retailers of wood and wood products would various treatment alternatives to eliminate or reduce the potential for spreading plant pests. NPPOs and RPPOs would benefit by having a variety of treatment options that could be used to eliminate or reduce pest risk and that conforms to the phytosanitary requirements of other contracting parties importing such goods.

A negative consequence of treatment of wood and wood products may increase deforestation, but also may stimulate planting of trees for harvest purposes.

**Supporting criteria (Strategic)**

- Extent of support for the proposed standard (e.g. one or more NPPOs or RPPOs have requested it, or one or more RPPOs have adopted a standard on the same topic).
- Frequency with which the issue addressed by the proposed standard emerges as a source of trade disruption (e.g. disputes or need for repeated bilateral discussions, number of times per year trade is disrupted).
- Relevance and utility to developing countries.
- Coverage (application to a wide range of countries/pests/commodities).
- Complements other standards (e.g. potential for the standard to be used as part of a systems approach for one pest, complement treatments for other pests).
- Foundation standards to address fundamental concepts (e.g. treatment efficacy, inspection methodology).
- Expected standard longevity (e.g. future trade needs, suggested use of easily outdated technology or products).
- Urgent need for the standard.

Treatments for wood and wood products are already in widespread use. These techniques are easy to apply and to assess for treatment efficacy, and are suited to a very large range of products. There are diverse numbers of treatments under this topic, and a standard set of guidelines, as envisaged for this ISPM, would be very helpful for both new and existing exporters alike. Because there are many treatment schedules for wood and wood products currently in existence, most foundation standards have been set, but streamlining needs to be applied for a more harmonious set of guidelines.

### Attachment 23: Submission No. 34

**Title (type of topic):** Temperature treatments for disinfestations of food crops by means of microwave processes using dielectric heating.

**Proposed by/ supported by:** Italy

*(Specification is not required)*

| <b>Submission form for IPPC standard setting work programme topics</b>   |  |   |
|--|--|---|
| <b>Proposed by:</b> Bruno Caio Faraglia (Name of IPPC Official Contact Point)  |  |   |
| <b>Contact:</b> (Contact information of an individual able to clarify issues relating to this submission)<br>Name: Federico Sorgoni<br>Position and organization: Official at Ministry of Agricultural Food and Forestry Policy<br>Mailing address: Via Venti Settembre, 20, 00187 Rome Italy<br><br>Phone: 0646656176 Fax: 0646656277<br>E-mail: f.sorgoni@mpaaf.gov.it   |  |   |
| <b>Type of topic:</b> (Choose one box only)  |  |   |
| <b>A. New ISPM:</b><br><input type="checkbox"/> Concept<br><input type="checkbox"/> Pest specific<br><input type="checkbox"/> Commodity specific<br><input type="checkbox"/> Reference   | <b>B. New component to an existing ISPM:</b><br><input type="checkbox"/> Supplement<br><input type="checkbox"/> Annex<br><input type="checkbox"/> Appendix<br><input type="checkbox"/> Technical Panel (technical area)<br><input type="checkbox"/> DP: Diagnostic protocol (subject)<br><input checked="" type="checkbox"/> PT: Phytosanitary treatment (topic)<br><input type="checkbox"/> Glossary term (subject) | <b>C. Revision/Amendment of:</b><br><input type="checkbox"/> ISPM<br><input type="checkbox"/> Supplement<br><input type="checkbox"/> Annex<br><input type="checkbox"/> Appendix<br><input type="checkbox"/> Glossary term |
| <b>Proposed title of new ISPM or component:</b> or <b>Title of document to be revised or amended:</b><br>Temperature treatments for disinfestations of food crops by means of microwave processes using dielectric heating.  |  |   |
| <b>Summary justification for the proposal (2 lines max.):</b><br>Temperature treatments for disinfestations of food crops allow to reduce post-harvest losses and to enhance Food Safety. This phytosanitary method also reduces the risk of introduction and spread of pests occurring usually through the international movement of infested products.   |  |   |
| Submissions should address the applicable criteria for justification of the proposal (as listed below). Where possible, information in support of the justification and that may assist in the prioritization should be indicated. All core criteria must be addressed; supporting criteria should be addressed if applicable  |  |   |
| <b>Core criteria:</b>  |  |   |
| <b>Contribution to the purpose of the IPPC as described in Article I.</b><br>Temperature treatments for disinfestations of food crops, to be carried out in the post-harvest phase, are an effective and sustainable method to prevent the introduction and spread of pests usually occurring through the international movement of infested products.   |  |   |
| <b>Feasibility of implementation at the global level (includes ease of implementation, technical complexity, capacity of NPPOs to implement, relevance for more than one region).</b><br>Temperature treatments for disinfestations of food crops are carried out by means of electromagnetic energy at microwave frequencies for dielectric heating processes.<br>A temperature treatment is a <b>physical method</b> that can be used to disinfest all products of plant origin infested by pests. Thanks to the heat effects deriving from the interaction between electromagnetic energy and polar molecules (in particular water), it is possible to achieve lethality of pests by <b>overheating</b> immediately when temperature achieves their <b>Lethal Temperature (LT)</b> .<br><b>Mortality tests</b> , conducted over the years, on various species of pests, in all life stages (eggs, pupae, larvae, adults) showed that LTs range from <b>55 to 60 °C</b> .<br>Microwave systems for carrying out temperature treatments of food crops do not need particular installation requirements, can be easily implemented and efficiently used by skilled staff after a short training. |  |   |

**Clear identification of the problems that need to be resolved through the development of the standard.**

Temperature treatments for disinfestations of food crops can solve the phytosanitary problems associated with the international movement of infested plant products (e.g. grain), can reduce post-harvest losses in qualitative and quantitative terms in virtue of Food Safety. This method of disinfestations is also compliant with the requirements of organic farming which is a sector of agriculture which has seen a constant and endless growth in recent years.

**Availability of, or possibility to collect, information in support of the proposed standard (e.g. scientific, historical, technical information, experience).**

The proposed temperature treatments adopt a technology which is the outcome of a hard scientific work carried out over the years together with some Academic partners and Institutional Laboratories belonging to the Italian CRA (Agricultural Research Council) and CNR (National Research Council), who have contributed to the research, its development and implementation. This temperature treatment disinfestations method was also the subject of an important research program fostered and financed by the Italian Ministry of Agricultural, Food and Forestry Policies, which has led to the realization of an industrial device for biological disinfestations of agricultural products for human and animal nutrition. A complete literature including all studies, conducted starting from 2004 and proving that microwaves are effective on pests (in all life stages) through an eco-friendly treatment which does not affect the products' nutritional and organoleptic aspects, can be provided upon request.

**Supporting criteria (Practical)**

- Feasibility of adopting the proposed standard within a reasonable time frame.
- Stage of development of the proposed standard (is a standard on the same topic already widely used by NPPOs, RPPOs or a relevant international organization).
- Availability of expertise needed to develop the propose standard.

The proposed treatment can be carried out through a consolidated technology which is already mature and ready to be implemented. This technology is already available on the marketplace, it works effectively and meets all requirements of economic and environmental sustainability.

Microwave processes are widely used in cooking and defrozing of food products but they have a great potential in disinfestations, too. This kind of method (dielectric heating) was submitted to the IPPC by the Italian NPPO and has been officially approved by FAO, during CPM-8 as valid phytosanitary measure for disinfestations of wood packaging materials. Recently it has been included in ISPM. No. 15.

Microwave processes for disinfestations of legumes were also the subject of a research project financed and fostered by the Italian NPPO, while further projects on the improvement of cereals' shelf-life were successfully developed with funds of Apulian Region.

**Supporting criteria (Economic)**

- Estimated value of the plants protected.
- Estimated value of trade affected by the proposed standard (e.g. volume of trade, value of trade, the percentage of Gross Domestic Product of this trade) if appropriate.
- Estimated value of new trade opportunities provided by the approval of the proposed standard.
- Potential benefits in terms of pest control or quarantine activities.

Temperature treatments for disinfestations of food crops help to reduce Post-harvest loss (PHL) due to biological infestations and contaminations. Losses can be both quantitative (physical losses caused by pests) and qualitative (loss of quality and value).

PHL estimates range from 5 to 30% but in developing countries losses can reach 45%. In sub-Saharan Africa alone the value of PHL overall is thought to be around 14 million tonnes a year, that is more than \$4 bn.

Economic benefits deriving from this type of pest-control and phytosanitary measure cannot be quantified and depend on the development extent of the proposed technology.

**Supporting criteria (Environmental)**

- Utility to reduce the potential negative environmental consequences of certain phytosanitary measures, for example reduction in global emissions for the protection of the ozone layer.
- Utility in the management of non indigenous species which are pests of plants (such as some invasive alien species).
- Contribution to the protection of the environment, through the protection of wild flora, and their habitats and ecosystems, and of agricultural biodiversity.

Temperature treatments for disinfestations of food crops elude the use of chemical substances which are conventionally used as pesticides and which notoriously have significant consequences on the environment. On the contrary, temperature treatments achieved through the use of microwave power have a very low environmental impact. Electromagnetic energy used to irradiate products for their thermal processing is totally confined into reverberation

chambers characterized by an effective electromagnetic shielding appositely studied to prevent any microwave leakage in the surroundings. Thanks to its prerogatives, this disinfestations method meets all requirements of organic farming. The proposed phytosanitary treatment, if carried out on plant products directly in their origin productive area, immediately after harvest, prevents the introduction and spread of quarantine pests that would represent a threat to living plants and to the whole ecosystem.

#### **Supporting criteria (Strategic)**

- **Extent of support for the proposed standard (e.g. one or more NPPOs or RPPOs have requested it, or one or more RPPOs have adopted a standard on the same topic).**
- **Frequency with which the issue addressed by the proposed standard emerges as a source of trade disruption (e.g. disputes or need for repeated bilateral discussions, number of times per year trade is disrupted).**
- **Relevance and utility to developing countries.**
- **Coverage (application to a wide range of countries/pests/commodities).**
- **Complements other standards (e.g. potential for the standard to be used as part of a systems approach for one pest, complement treatments for other pests).**
- **Foundation standards to address fundamental concepts (e.g. treatment efficacy, inspection methodology).**
- **Expected standard longevity (e.g. future trade needs, suggested use of easily outdated technology or products).**
- **Urgent need for the standard.**

Temperature treatments for disinfestations of food crops help to reduce Post-harvest loss (PHL) ranging from 5 to 30% but in developing countries losses can reach 45%. In sub-Saharan Africa alone the value of PHL overall is thought to be around 14 million tonnes a year, that is more than \$4 bn.

Temperature treatments to be carried out in the post-harvest phase allow to disinfest food crops from pests in all life stages (eggs included) without the use of any chemical substances. Conventional disinfestations methods like conditioning of silos and warehouses, fumigation, controlled atmosphere, extreme temperatures present the following disadvantages:

- High costs and long treatment times
- Handling of dangerous chemicals
- Persistence in food of toxic residues
- Pollution

The development of new and safe technologies is a key aspect of any programme targeting reduction of PHL, in order to enhance product quality and safety,

- assuring that crops are free from toxic chemical pesticides harmful to human health and to the environment
- assuring that crops become valuable commodities even on foreign markets which are more and more demanding in terms of quality and safety

and to improve food availability especially in lower-income countries by extending the shelf-life of food.

As for developed countries, it should be highlighted that this disinfestations method is fully compliant with organic farming techniques. Organic farming is a sector of European agriculture which has seen a constant and endless growth in recent years. The EC also fosters this kind of agriculture which is still characterized by a technological gap. Temperature treatments using microwave reverberation systems are conceived also to fill this gap and to make eco-friendly disinfestations treatments possible also at an industrial production scale.

#### **Diagnostic protocols are subject to additional criteria. For proposals for DPs, please elaborate on the following criteria to help the future consideration of the subject proposed:**

- Need for international harmonization of the diagnostic techniques for the pest (e.g. due to difficulties in diagnosis or disputes on methodology)
- Relevance of the diagnosis to the protection of plants including measures to limit the impact of the pest.
- Importance of the plants protected on the global level (e.g. relevant to many countries or of major importance to a few countries).
- Volume/importance of trade of the commodity that is subjected to the diagnostic procedures (e.g. relevant to many countries or of major importance to a few countries).
- Other criteria for topics as determined by CPM that are relevant to determining priorities
- Balance between pests of importance in different climatic zones (temperate, tropics etc) and commodity classes.
- Number of labs undertaking the diagnosis.
- Feasibility of production of a protocol, including availability of knowledge and expertise.

N/A