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ENG

2016 IPPC General Survey

A report of findings of contracting party implementation



International Plant Protection Convention
Protecting the world's plant resources from pests

DRAFT

2016 IPPC GENERAL SURVEY

A report of findings of contracting party implementation

Important note – this document is DRAFT and is subject to formal editing, formatting and publishing processes.

Contents

Acronyms	2
Executive Summary	3
Background	3
Methodology	3
Findings	4
Responses	4
General provisions	5
NPPO responsibilities	6
Distribution of information	10
Phytosanitary certification	11
Import requirements	12
International cooperation	16
International standards	17
Diagnostic protocols	21
Phytosanitary treatments	21
CPM recommendations	22
Conclusions	23
Annex 1: 2016 IPPC General Survey (English)	25
Annex 2: Detailed survey results	49

Acronyms

ALPP	area of low pest prevalence
CPM	Commission on Phytosanitary Measures (of the IPPC)
DP	diagnostic protocol (of ISPM 27)
EC	European Commission
FAO	Food and Agriculture Organization (of the United Nations)
IRSS	Implementation Review and Support System (of the IPPC)
IPP	International Phytosanitary Portal (of the IPPC)
IPPC	International Plant Protection Organization
ISPM	International standard for phytosanitary measures
NPPO	National plant protection organization
OCP	Official Contact Point (of a contracting party)
PFA	pest free area
PRA	pest risk analysis
PT	phytosanitary treatment (of ISPM 28)
REC	Regional Economic Community
RPPO	Regional plant protection organization
SPS	Sanitary and Phytosanitary Agreement (of the WTO)
WTO	World Trade Organization

Executive Summary

Background

The generous support of the European Commission (EC) has allowed the Implementation Review and Support System (IRSS) to function on a project basis from 2011 through March 2017. The IRSS is an evaluation tool of the International Plant Protection Convention (IPPC) that focuses on identifying contracting parties' challenges and opportunities for implementation of the Convention and International Standards for Phytosanitary Measures (ISPMs). Identifying challenging areas as well as best practices provides vital input in the strategic development of resources and tools to enhance implementation at the national, regional and global levels. Thus, the objective of the IRSS is to facilitate and promote the implementation of the IPPC and ISPMs, while contributing to the objectives of the [IPPC Strategic Framework](#).

When the IRSS project began, the decision was made to undertake an IPPC General Survey to gather baseline information on contracting party implementation of the IPPC and its standards. The first [IPPC General Survey](#) was conducted in late 2012 and provided valuable information about the state of contracting parties' implementation. To understand the current situation of contracting parties' implementation four years later a second general survey has been undertaken to again understand the national and regional needs of contracting parties to assist the IPPC Secretariat in planning work to support and strengthen implementation.

The 2016 IPPC General Survey has three main objectives. These are to review contracting parties:

- (i) implementation of the obligations and responsibilities described in the International Plant Protection Convention;
- (ii) implementation and prioritization of the 37 international standards for phytosanitary measures (ISPMs); and
- (iii) implementation of recommendations made by the Commission on Phytosanitary Measures (CPM).

This review is intended to serve as input in the strategic development of resources and tools to enhance implementation at the national, regional and global levels and help inform the work programme of the CPM subsidiary bodies. It will also be a major input towards the IRSS' second triennial implementation review report (2014-2017), which will include a comparison of the 2012 and 2016 surveys and summarize the three years of the projects' activities and outputs.

Methodology

The 2016 IPPC General Survey (Annex 1) was based on the 2012 version with additional inclusions of questions about implementation of CPM recommendations. The survey was reviewed by the IPPC Secretariat and the CPM Bureau before circulation. The survey was sent to the Official Contact Points (OCPs) of IPPC's 182 contracting parties and regional plant protection organizations (RPPOs) using an online survey format (SurveyMonkey cloud-based software). Contracting parties and RPPOs were given the option of responding in English online or through submission of the Word version of the survey in any of the six official languages of the Food and Agriculture Organization of the United Nations (FAO) – Arabic, Chinese, English, French, Russian and Spanish.

The survey was initially released to OCPs on the 9 September 2016 for two months, however due to delays in responses this was extended an additional two weeks to allow for late submissions. To facilitate survey responses the IPPC Secretariat sent out several reminders to contracting parties and RPPOs and followed up on submissions of partial responses. Additionally, the IPPC Secretariat requested the CPM Bureau and RPPOs engage contracting parties in their regions to facilitate further responses.

The evaluation of the survey findings is based on primary data from submissions made on behalf of IPPC OCPs and interpretation of associated comments by the IPPC Secretariat. It is acknowledged that during contracting party answering of the survey there may be misinterpretations of survey questions and subsequent responses, which could lead to the limitations in the validity. Comments on this occurrence will be made as necessary.

Contracting parties who have shown their commitment to the IPPC by completing the survey will be acknowledged at CPM 12 and have their implementation needs considered for prioritization in the IPPC work programme.

Findings

Responses

Responses to the 2016 IPPC General Survey were received through the online system (SurveyMonkey) in English and as Word documents emailed to the IPPC Secretariat (ippc@fao.org) in any of the six FAO official languages. Survey responses were all translated into English for evaluation of results.

In total 100 survey submissions were received from contracting parties, out of 182 surveys sent out (55% response rate). One submission was received from a RPPO, out of nine surveys sent out (11% response rate). Survey submissions were accepted by the IPPC Secretariat when at least two thirds completed responses were submitted. In addition to the accepted survey submissions, a number of other submissions were attempted by contracting parties, but not completed.

By region, contracting party response rate varied from 33 to 100% (Table 1). The highest response rates from IPPC contracting parties were from North America (100%), the Southwest Pacific (85%) and Africa (60%). Contracting parties with lower response rates included Latin America (55%), Europe (49%), Asia (48%) and the Near East (33%).

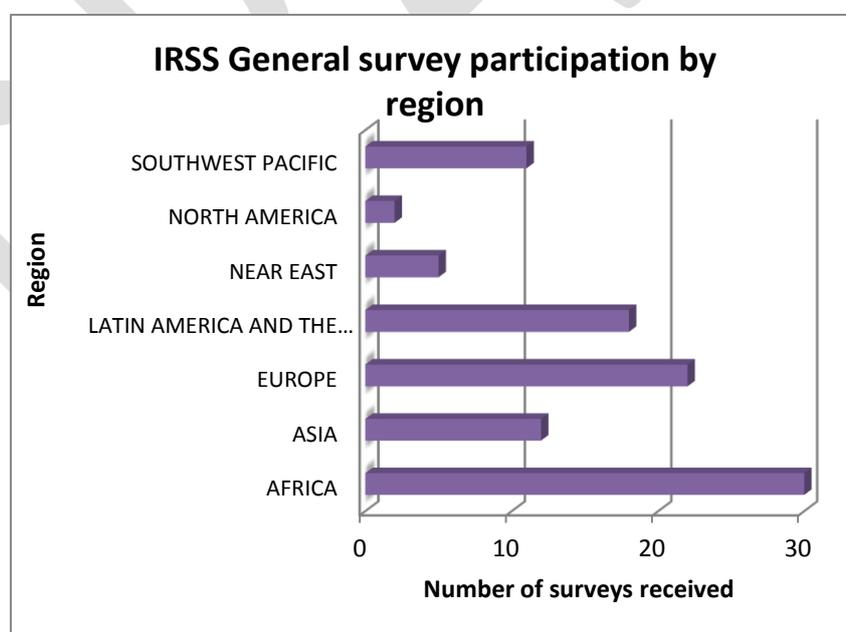


Figure 1: Responding contracting parties by region.

This report has been structured around key implementation areas of the IPPC, which were separated out into different sections of the survey. Findings from the survey are organized under the following implementation areas and included in more detail in Annex 2.

- General provisions

- NPPO responsibilities
- Distribution of information
- Phytosanitary certification
- Import requirements
- International cooperation
- International standard for phytosanitary measures (ISPMs)
 - o Phytosanitary treatments
 - o Diagnostic protocols
- CPM recommendations

Conclusions will also be made based on the survey findings.

General provisions

The general provisions relating to the organizational arrangements for national plant protection are set out in Article IV, 1 & 4, of the Convention. This relates to the establishment of an NPPO, a published description of the NPPO on the International Phytosanitary Portal (IPP), and any subsequent changes made, and whether the description has been shared with other contracting parties on request.

The general provisions of establishing an NPPO are implemented by most responding contracting parties, however three indicate they have no official NPPO or only an NPPO through the IPP. The description of the NPPO is published on the IPP by two thirds of contracting parties, with changes submitted and requests for descriptions by other contracting parties only implemented approximately half of the time (Table 1).

Table 1: Responding contracting parties' answers to *General provisions* questions

Question (1-4)	Yes	Partially	Only through IPP	No
Has a single official NPPO been established by your country (Art. IV, 1)?	75	10	2	3
Has your country published a description of its official NPPO on the International Phytosanitary Portal (IPP) (Art. IV, 4)?	66	13	NA	11
Has your country submitted changes of its official NPPO and informed the IPPC Secretariat, via the IPP (Art. IV, 4)?	54	6	NA	31
Has your country provided a description of its NPPO organization arrangements to another contracting party, on request (Art. IV, 4)?	51	8	NA	31

The summary of comments received for implementation of the general provisions include:

- 1) *Has a single official NPPO been established by your country (Art. IV, 1)*
 - Contracting parties have established NPPOs under multiple types of government ministries, departments, organizations and agencies.
 - Contracting parties have established NPPOs as autonomous entities, integrated with other disciplines, such as animal health and food safety or have services shared across multiple government agencies.
 - NPPOs are established in accordance with national legislation to provide them with the mandate to carry out responsibilities and obligations under the Convention.

- 2) *Has your country published a description of its official NPPO on the International Phytosanitary Portal (IPP) (Art. IV, 4)*
 - Contracting parties publish descriptions of their official NPPO in many ways with different levels of detail, from high level summarized versions to detailed diagrams showing departments and responsibilities.
 - Most contracting parties have published organograms of their NPPOs on the IPP, however not all are complete due to missing information or complexities relating to arrangements with other government agencies.
 - Some contracting parties were unaware they are required to publish a description of their NPPO on the IPP or share with other contracting parties on request.
 - Contracting parties have not uploaded their NPPO descriptions due to their OCP or Editor not knowing how to update details on the IPP or internet connection is of low quality.
- 3) *Has your country submitted changes of its official NPPO and informed the IPPC Secretariat, via the IPP (Art. IV, 4)*
 - Most contracting parties submit changes to the description of their NPPO to the IPP when necessary.
 - Several contracting parties indicate that the details of their NPPO are outdated and need to be updated, are in the progress of updating details or are awaiting clearance to upload a new version.
 - Some contracting parties have not updated their NPPO descriptions as they do not know how to use the IPP or internet connection is of low quality.
- 4) *Has your country provided a description of its NPPO organization arrangements to another contracting party, on request (Art. IV, 4)*
 - Contracting parties mostly share the descriptions of their NPPO with other contracting parties when undertaking pest risk analysis or trade negotiations.
 - Some contracting parties refer requests for the description of their NPPO to the information on their country webpage on the IPP.
 - Many contracting parties have never received a request for the description of their NPPO from another contracting party.

NPPO responsibilities

The responsibilities of NPPOs are set out in Article IV, 2 of the Convention. This relates to the activities directly undertaken by the NPPO or under the authority of the NPPO. These activities include the issuance of phytosanitary certificates, plant pest surveillance, inspection or treatment of consignments, protection of endangered areas, designation, maintenance or surveillance of pest free areas or areas of low pest prevalence, the conduct of pest risk analyses, consignment security and staff development and training.

These responsibilities can be implemented directly by the NPPO or under the authority of the NPPO. However, it is extremely important to emphasise that functions and activities undertaken by third parties must do so under an official authorization agreement. All authorized collaborating institutions or service providers should operate only under the responsibility of the NPPO¹.

NPPO responsibilities are implemented by most responding contracting parties. The majority of contracting parties implement the obligations relating to phytosanitary certificates and inspection of consignments, most implement obligations for phytosanitary security and treatments (where necessary) and there is more varied implementation for protection of endangered areas and pest freedom. Ten responding contracting parties answer they undertake no pest risk analysis (Table 2).

¹ See IPPC technical resource – Operation of a National Plant Protection Organization http://www.phytosanitary.info/sites/phytosanitary.info/files/Operation_of_a_NPPO_manual_English_1.1_1.pdf

Table 2: Responding contracting parties' answers to NPPO responsibilities questions

Question (5-13)	High	Moderate	Low	None
Issuance of phytosanitary certificates (Art. IV, 2a)	74	17	0	1
Surveillance of plants and their growing environment (Art. IV, 2b)	38	33	17	4
Inspection of consignments of plants/plant products moving in international traffic (Art. IV, 2c)	59	27	5	1
Treatment of consignments (Art. IV, 2d)	45	21	10	5
Protection of endangered areas (Art. IV, 2e)	32	30	18	11
Designation, maintenance and surveillance of pest free areas and areas of low pest prevalence (Art. IV, 2e)	24	30	18	18
Conduct of pest risk analysis (Art. IV, 2f)	39	26	17	10
Phytosanitary security of consignments ensured through appropriate procedures (Art. IV, 2g)	46	32	11	2
Staff development and training (Art. IV, 2h)	32	37	21	3

The summary of comments received for implementation of *NPPO responsibilities* include:

5) *Issuance of phytosanitary certificates (Art. IV, 2a)*

- For the majority of contracting parties phytosanitary certificates are issued by the NPPO, for both export and re-export purposes, while others have more than one competent authority (under the NPPO).
- Contracting parties issue phytosanitary certificates in accordance with IPISM 12: *Phytosanitary certificates* and are certified based on the import requirements of trading partners.
- Some contracting parties are issuing and exchanging phytosanitary certificates through an electronic system, while others are waiting for the IPPC ePhyto hub and national systems to be operational and accessible.
- Phytosanitary certificates are usually issued by sworn inspectors of the NPPO who are trained and authorized to carry out the activity under national legislation, however several contracting parties have a shortage of trained inspectors which can delay phytosanitary certification.
- Issues arise with the passenger pathway where goods are transported without phytosanitary certification and pose a significant risk.

6) *Surveillance of plants and their growing environment (Art. IV, 2b)*

- Surveillance programmes range in coverage from the monitoring of commercial crops, plants in post entry quarantine facilities, to protection of wild flora in forests and endangered areas.
- Contracting parties undertake surveillance activities in accordance with IPISM 6: *Guidelines for surveillance*, however not all contracting parties are aware of all requirements in the standard.
- Surveillance systems may or may not be included in national legislation and can include a network of active and passive monitoring that involves different levels of national stakeholders.
- Surveillance of commercial crops may be limited to those that are considered a high risk to national interests or undertaken in response to pest outbreaks.
- Specific commodity surveys are considered important by many contracting parties to inform the development of commodity and national pest lists.
- The major limitation faced by contracting parties is financial resources to undertake surveillance activities, available technologies and insufficient human resources with appropriate competencies.
- Technical support for surveillance activities has been prioritized by many contracting parties.

- 7) *Inspection of consignments of plants/plant products moving in international traffic (Art. IV, 2c)*
- Inspection activities include inspection of consignments for regulated pests and associated documentation in compliance with import or transit requirements.
 - Contracting parties undertake phytosanitary inspection in accordance with IPSP 20: *Guidelines for a phytosanitary import regulatory system* and ISPM 23: *Guidelines for inspection*, however not all contracting parties are aware of all requirements in these standards.
 - Phytosanitary inspection is undertaken at the point of entry, at either the national or regional level when contracting parties share collective import requirements. However, some contracting parties have bilateral agreements for pre-clearance inspection of consignments in the export country to facilitate the import process.
 - The use of single window is used to specify phytosanitary inspection needs, with activities undertaken by the NPPO or designated officials from customs, immigration agencies or other technical areas such as veterinary inspectors.
 - Inspection activities are included in national legislation and carried out by appropriately trained and authorized NPPO inspectors.
 - The capacity of the NPPO and their inspectors to provide total border coverage can be very challenging for contracting parties with multiple borders and in few cases safety issues due to political instability affects NPPO work.
 - The major limitation faced by contracting parties is financial resources to undertake inspection activities, insufficient human resources with appropriate competencies and the necessary equipment.
- 8) *Treatment of consignments (Art. IV, 2d)*
- Contracting parties undertake treatments as necessary, for export purposes to comply with import requirements and for imported commodities for disinfection or disinfestation purposes.
 - Phytosanitary treatments are undertaken by NPPOs or by authorized third party service providers in accordance with IPSP 28: *Phytosanitary treatments (and annexes)* for specific pests and ISPM 15: *Regulation of wood packaging material in international trade*, however not all contracting parties are aware of all requirements in these standards.
 - Some contracting parties are aware of private companies undertake phytosanitary treatments with no official authorization by the NPPO.
 - Due to the expense of conducting phytosanitary treatments and the infrastructure, facilities and chemicals necessary, many contracting parties undertake no or limited treatments.
 - The restriction on the use of methyl bromide (MeBr) has limited treatments available to contracting parties for quarantine purposes, with few alternatives.
- 9) *Protection of endangered areas (Art. IV, 2e)*
- Many contracting parties undertake the protection of endangered areas is undertaken in accordance with national legislation, either as the responsibility of the NPPO or in collaboration with other government ministries.
 - Contracting parties choose to protect all endangered areas, those where there are plants growing of cultural significance or none at all.
 - Some contracting parties consider endangered areas in their pest risk analysis process.
 - For other contracting parties the obligation for the protection of national endangered areas is unknown or poorly understood, therefore not undertaken.
 - The major limitation faced by contracting parties is financial resources and insufficient human resources with appropriate competencies to undertake protection of endangered areas, due to the prioritization of other national interests.
- 10) *Designation, maintenance and surveillance of pest free areas and areas of low pest prevalence (Art. IV, 2e)*
- Contracting parties with established pest free areas (PFAs) and areas of low pest prevalence (ALPP) are often for regulated pests of national economic significance, such as exotic species of fruit flies and pests of culturally significant crops.

- The establishment, maintenance and declaration of PFAs and ALPPs are undertaken by NPPOs and authorized third party service providers and officials in accordance with IPSM 4: *Requirements for the establishment of pest free areas* and ISPM 22: *Requirements for the establishment of areas of low pest prevalence*, however not all contracting parties are aware of all requirements in these standards.
- The declaration of PFAs and ALPPs provides contracting parties with a phytosanitary measure that is internationally recognized and thus facilitates new market access opportunities.
- The maintenance of PFAs and ALPPs can be difficult for contracting parties who share borders with multiple countries, due to high levels of pest pressure.
- Many contracting parties have no PFAs or ALPP due to financial constraints and insufficient human resources with appropriate competencies to undertake establish and maintain PFA and ALPP programmes.

11) *Conduct of pest risk analysis (Art. IV, 2f)*

- The conduct of pest risk analysis (PRA) is undertaken at varying levels by contracting parties, from NPPOs with dedicated PRA units, PRA being conducted by an international organization at the regional level, on an adhoc basis only when necessary, depending on phytosanitary risk or not at all.
- When PRA is conducted it is done so, by most contracting parties, in accordance with IPSM 2: *Framework for pest risk analysis* and ISPM 11: *Pest risk analysis for quarantine pests*, however not all contracting parties are aware of all requirements in these standards.
- PRA are used by contracting parties to identify and select technically justified phytosanitary measures and thus facilitate opportunities for market access.
- Contracting parties face limitations in the number of PRAs they can undertake in relation to extensive market access requests.
- Many contracting parties conduct limited or no PRAs due to financial constraints and insufficient human resources or high turnover of trained staff.

12) *Phytosanitary security of consignments ensured through appropriate procedures (Art. IV, 2g)*

- Security of consignments includes different aspects by contracting parties, from storage at approved premises, use of specific packaging materials, appropriate handling to maintain consignment integrity after phytosanitary certification, inspection of sea and air cargo containers, locking and sealing of vehicles and secure transportation.
- Several contracting parties have a legal obligation to ensure phytosanitary security and have associated manuals and procedures to ensure security of consignments after certification to maintain consignment integrity.
- Although several contracting parties have phytosanitary security procedures, they are sometimes outdated and need to be reviewed for effectiveness.
- The major limitation faced by contracting parties is financial resources to ensure phytosanitary security, insufficient human resources and no established procedures.

13) *Staff development and training (Art. IV, 2h)*

- Staff development and training ranges from induction courses, in-house trainings, use of training centres, sending employees to diagnostic laboratories, universities, frameworks of bilateral or multilateral programmes and participation in regional and international workshops.
- When a structured plan is developed, it can include regularity of training, target trainees, training workshops, use of specifically designed and published teaching materials and understanding needs in relation to technical assistance projects.
- Contracting parties who have training programmes may not offer them to all employees, such as temporary staff and contractors.
- The use of new technologies, techniques, taxonomic identification and new phytosanitary issues are highlighted as areas where training is needed.
- Several contracting parties rely on external training activities for their staff as no national resources are available to undertake activities.

- Contracting parties understand the need for staff development and training but are limited by the financial resources and expertise available to undertake activities, this has been prioritized as an area where contracting parties need regional and international technical assistance.

Distribution of information

The obligations relating to the distribution of information are set out in Article IV, 3, of the Convention. This relates to the distribution of information by contracting parties to share information about regulated pests, the issuance of phytosanitary regulations, research and investigation in the field of plant protection and performance of other such functions that may be required for implementation of the Convention.

The obligations relating to the distribution of information vary in implementation, from very high to low and several contracting parties reporting no implementation at all. The majority of contracting parties responded with a moderate to very high degree of implementation for the issuance of phytosanitary regulations and information relating to regulated pests and their prevention and control, and moderate to high for research and investigation in the field of plant protection and other such functions (Table 3).

Table 3: Responding contracting parties' answers to *Distribution of information* questions

Question (14-17)	Very high	High	Moderate	Low	None
Distribution of information regarding regulated pests and the means for their prevention and control (Art. IV, 3a)	18	34	21	13	5
Research and investigation in the field of plant protection (Art. IV, 3b)	10	23	29	23	4
Issuance of phytosanitary regulations (Art. IV, 3c)	32	36	17	3	2
Performance of other such functions as may be required by the Convention (Art. IV, 3d)	9	28	32	12	5

The summary of comments received for implementation of *Distribution of information* include:

14) Distribution of information regarding regulated pests and the means for their prevention and control (Art. IV, 3a)

- Contracting parties distribute information in many ways, including the publishing literature, leaflets and posters, through media releases and announcements, giving talks at schools and higher educational institutions, through national websites, radio and television, at open days and on the International Phytosanitary Portal (IPP).
- Information is released to meet obligations of international organizations, such as the IPPC, notifications required by the World Trade Organization (WTO) and regional organizations that contracting parties are members of.
- Several contracting parties only release information on regulated pests upon request, or not at all, being unaware that this is an obligation.
- The major limitation faced by contracting parties is financial resources and insufficient human resources to gather and collate appropriate information for distribution.

15) Research and investigation in the field of plant protection (Art. IV, 3b)

- When research is undertaken by contracting parties, it can be done by dedicated units within the NPPO, in collaboration with research institutions or through bilateral or multilateral programmes.
- Research that is conducted is often on regulated pests of economic significance, phytosanitary treatments, diagnostics and new and improved control methods, with an emphasis on making them more environmentally friendly.

- NPPOs with very high implementation of this obligation have developed educational programmes resulting in graduates (PhDs and Masters) from different fields of plant protection.
- Due to the expense, expertise and infrastructure needed to conduct research and investigation in the field of plant protection, many contracting parties undertake no or limited research.

16) Issuance of phytosanitary regulations (Art. IV, 3c)

- Contracting parties usually issue phytosanitary regulations on their NPPO websites.
- Many contracting parties are in the process of planning, reviewing and updating of phytosanitary regulations, in addition to procedures and manuals to comply with international standards.
- Contracting parties have legislation for the enactment of regulations, but may have not issued these due to the limitation of financial and human resources and administrative delays.
- Where phytosanitary regulations do not exist, some contracting parties use import permits to specify the requirements for commodities that have a high risk of pest association.

17) Performance of other such functions as may be required by the Convention (Art. IV, 3d)

- Contracting parties generally state they undertake other functions required under the Convention to the best of their ability (capacity) with the resources (financial, human, facilities and infrastructure) they have available to them.
- In certain areas contracting parties require technical assistance.
- Several contracting parties specify plant protection and quarantine awareness raising is an area they are prioritizing, especially with regard to exporting and importing.

Phytosanitary certification

The obligations relating to phytosanitary certification are set out in Article V of the Convention. This relates to having arrangements to enable phytosanitary certification, issuance of phytosanitary certificates, use of additional declarations and appropriately trained public officers to issue certificates.

The obligations relating to phytosanitary certificate are in general very highly implemented. The majority of contracting parties responded high to very high implementation of having arrangements in place to enable phytosanitary certification, issue certificates based on inspection and related activities and appropriately trained public officers. The use of additional declarations by responding contracting parties had slightly lower implementation, with more moderate responses, however this is probably due to the use of additional declarations only when they're technically justified (Table 4).

Table 4: Responding contracting parties' answers to Phytosanitary certification questions

Question (18-21)	Very high	High	Moderate	Low	None
Arrangements are in place to enable phytosanitary certification (Art. V, 1)	45	32	10	2	1
Issuance of phytosanitary certificates are based on inspection and related activities (Art. V, 2)	49	27	11	1	0
Phytosanitary certificates are issued by public officers who are technically qualified and duly authorized by the official NPPO (Art. V, 2a)	49	30	6	3	3
The requirements for additional declarations are limited to those that are technically justified (Art. V, 2a)	38	28	17	4	3

The summary of comments received for implementation of *Phytosanitary certification* include:

18) *Arrangements are in place to enable phytosanitary certification (Art. V, 1)*

- Most contracting parties state their readiness for phytosanitary certification, with appropriate legislation, trained officials and systems for issuance in place.
- Contracting parties have systems of legislation, frameworks, procedures and quality management systems in accordance with ISPM 7: *Phytosanitary certification system*, ISPM 12: *Phytosanitary certificates* (including *Annex 1*) and ISPM 31: *Methodologies for sampling consignments*.
- Contracting parties are eager for the implementation of the IPPC ePhyto system to allow electronic phytosanitary certificate to facilitate trade.
- Acquiring up to date import requirements from trading partners is seen as a challenge to some contracting parties, in addition to obtaining requirements in English or another official language.
- Some contracting parties challenges in phytosanitary certification are due to lack of appropriate equipment, a shortage of trained NPPO officers and occurrence of fraudulent certificates being generated by unauthorized entities.

19) *Issuance of phytosanitary certificates are based on inspection and related activities (Art. V, 2)*

- Most contracting parties state phytosanitary certificates will only be issued under the authority of the NPPO on the basis of consignment and document inspection, treatments when necessary and verifying import requirements have been met.
- Contracting parties issue phytosanitary certificates in accordance with ISPM 12: *Phytosanitary certificates* and are certified based on the import requirements of trading partners.
- Contracting parties often follow official procedures for the inspection and issuance of phytosanitary certificates to ensure compliance.
- Some contracting parties specify mandatory inspection of all consignments, while others inspect based on risk profiles or agreements with trading partners.
- Contracting parties are aware some phytosanitary certificates have been issued without inspection when based on outdated information or by staff with insufficient competencies.

20) *Phytosanitary certificates are issued by public officers who are technically qualified and duly authorized by the official NPPO (Art. V, 2a)*

- Most contracting parties state phytosanitary certificates are only issued by public officers who have been trained and are technically qualified and authorized by the NPPO to undertake these activities.
- Contracting parties often have the authorization and duties of public officers specified in legislation.
- Public officers of several contracting parties are required to have educational background in plant protection and have specific job descriptions defining their responsibilities to undertake their duties.
- Some contracting parties are aware in limitations of their staff capacity to issue phytosanitary certificates, with a need for technical assistance and capacity building in this area.

21) *The requirements for additional declarations are limited to those that are technically justified (Art. V, 2a)*

- The majority of contracting parties state additional declarations are only used when technically justified, based on the outcomes of pest risk analyses.
- Contracting parties agree with their trading parties in the use of additional declarations, however some contracting parties have never encountered the requirement for use yet.
- Other information to be included on the phytosanitary certificate not specified in an additional declaration is stated in the appropriate section of the certificate, in accordance with ISPM 12: *Phytosanitary certificates*.

Import requirements

The obligations relating to import requirements are set out in Article VII, 2, of the Convention. This relates to obligations for pest risk analysis, technical justification of phytosanitary measures, the availability of requirements, restrictions and prohibitions, designated points of entry, inspection procedures, including consideration for inspecting perishable goods, the occurrence, notification,

investigation and follow-up reporting of non-compliances, modification of phytosanitary measures when necessary and use of pest status information.

The obligations relating to import requirements vary in implementation, from very high to low and several contracting parties reporting no implementation at all. The majority of contracting parties responded with a moderate to very high degree of implementation for technical justification of phytosanitary measures, the availability of requirements, restrictions and prohibitions, designated points of entry and inspection procedures, including consideration for inspecting perishable goods. There is more varied implementation for pest risk analysis, obligations relating to non-compliance and modification of phytosanitary measures. The lowest implementation for this section relates to pest status information (Table 5).

Table 5: Responding contracting parties' answers to *Import requirements* questions

Question (22-32)	Very high	High	Moderate	Low	None
Pest risk analysis is conducted (Art. IV, 2f)	27	24	19	15	7
Phytosanitary measures are technically justified (Art. VII, 2a)	36	29	19	3	4
Phytosanitary requirements, restrictions and prohibitions are publicly available to contracting parties (Art. VII, 2b)	32	34	16	5	4
Designated points of entry are publicly available to contracting parties (Art. VII, 2d)	39	29	12	6	4
Inspection and other phytosanitary procedures take place as promptly as possible (Art. VII, 2e)	36	39	12	2	1
Inspection and other phytosanitary procedures are prioritized and performed with due regard to their perishability (Art. VII, 2e)	38	36	11	3	2
Exporting contracting parties are notified of significant cases of non-compliance with phytosanitary certification i.e. detection of a regulated pest, deficiencies or absence of a certificate (Art. VII, 2f)	27	29	18	10	6
Your country investigates significant cases of non-compliance that are reported by an importing contracting party (Art. VII, 2f)	30	36	18	10	6
The result of investigations of significant cases of non-compliance are reported to the importing contracting party concerned (Art. VII, 2f)	18	32	27	7	5
Phytosanitary measures are modified promptly when technically justified to address phytosanitary risk (Art. VII, 2g & h)	21	32	25	11	2
Pest status information is developed, maintained and made available (Art. VII, 2j)	11	33	29	14	4

The summary of comments received for implementation of *Import requirements* include:

22) *Pest risk analysis is conducted (Art. IV, 2f)*

- see NPPO responsibilities, question 11.

23) *Phytosanitary measures are technically justified (Art. VII, 2a)*

- Most contracting parties state their phytosanitary measures are justified based on the pest risk analysis process, available scientific information and in accordance with the WTO Sanitary and Phytosanitary (SPS) Agreement, the Convention and relevant ISPMs.
- When selecting phytosanitary measures this is done so based on pest risk analyses, the level of risk acceptable to the contracting party, non-compliances of existing pathways if appropriate and operational feasibility of undertaking measures.
- Contracting parties specify a limitation in justification of measures can be due to political interference.

24) *Phytosanitary requirements, restrictions and prohibitions are publicly available to contracting parties (Art. VII, 2b)*

- The majority of contracting parties state their phytosanitary requirements, restrictions and prohibitions are available in the public domain, accessible to all contracting parties. This includes on their national websites, the IPP, regional organization websites and through the WTO notification system.
- Some contracting parties specify phytosanitary requirements on import permits, especially for high risk commodities e.g. plants for planting.
- Other contracting parties only make phytosanitary requirements, restrictions and prohibitions available to contracting parties on request, but may inform other stakeholders of requirements as general practice, such as importers.

25) *Designated points of entry are publicly available to contracting parties (Art. VII, 2d)*

- Designated points of entry specified by contracting parties are varied and include sea ports, airports, river ports and border land crossings, where there are official points of entry and phytosanitary activities undertaken.
- The majority of contracting parties provide information on their ports of entry in the public domain, accessible to all contracting parties. This includes on their national websites, the IPP and regional organization websites.
- Some contracting parties do not make this information available, were not sure if it was available or only provide it on a bilateral basis.

26) *Inspection and other phytosanitary procedures take place as promptly as possible (Art. VII, 2e)*

- Most contracting parties state that inspections are carried out as soon as possible, ranging from several hours to periods of 24, 28 or 72 hours.
- Some contracting parties coordinate their inspections through appointments, by use of an electronic single window system shared with customs and in coordination with other authorities.
- Contracting parties often have their inspection procedures and timeframes specified in legislation and operating procedures and also strive to follow agreements to which they are signatory, such as the Trade Facilitation Agreement which has an obligation to the customer.
- The limitation of contracting parties in promptly inspecting imported consignments is stated as the availability of facilities, inspectors and points of entry.

27) *Inspection and other phytosanitary procedures are prioritized and performed with due regard to their perishability (Art. VII, 2e)*

- The majority of contracting parties give priority to inspect imported commodities that are of a perishable nature to minimise loss, either through legislative direction or through best practices.
- Other contracting parties inspect commodities only through coordination of an appointment system or give no preference to commodity type and inspect consignments on a first in, first served basis.
- To facilitate the import verification process, some contracting parties give priority to the diagnostics of intercepted regulated pests on perishable commodities.

- 28) *Exporting contracting parties are notified of significant cases of non-compliance with phytosanitary certification i.e. detection of a regulated pest, deficiencies or absence of a certificate (Art. VII, 2f)*
- Contracting parties report non-compliances to their trading parties to varying degrees, from use of official notifications, to informal reporting and some not reporting at all.
 - Contracting parties who do report non-compliances do so in accordance with ISPM 13: *Guidelines for the notification of non-compliance and emergency action* and strive to provide their trading partner with as much information as possible for their investigations.
 - Notifications of non-compliances are often made between the IPPC official contact points of trading contracting parties.
 - Some contracting parties don't report the non-compliance of documentation, only the interception of regulated pests on a consignment.
 - Contracting parties state that non-compliances are not reported because of limitation of available financial and human resources to perform this activity.
- 29) *Your country investigates significant cases of non-compliance that are reported by an importing contracting party (Art. VII, 2f)*
- Contracting parties follow procedures for the investigation of non-compliances in accordance with their national legislation and operating procedures, with an objective to take actions to avoid re-occurrence.
 - Contracting parties may investigate the cause of a non-compliance within the NPPO, by the IPPC official contact point or it may be undertaken by a separate authority.
 - A few contracting parties have answered they don't know if non-compliances are investigated and they are unsure if other contracting parties undertake this activity.
 - Some contracting parties state there is a limitation of investigating non-compliances associated with the availability of financial and human resources to perform this activity.
- 30) *The result of investigations of significant cases of non-compliance are reported to the importing contracting party concerned (Art. VII, 2f)*
- Contracting parties vary in their reporting of the results of non-compliances to the importing contracting party concerned, from full reporting based in accordance with ISPM 13: *Guidelines for the notification of non-compliance and emergency action*, reporting only on request or when it is required under a bilateral work plan, to none at all.
 - Contracting parties who do report as standard practice, report the investigation findings and corrective actions, most often to the IPPC official contact point.
 - Some contracting parties state there is a limitation of reporting non-compliances due to the availability of financial and human resources to perform this activity.
- 31) *Phytosanitary measures are modified promptly when technically justified to address phytosanitary risk (Art. VII, 2g & h)*
- Contracting parties state that phytosanitary measures are modified promptly in response to risk posed by regulated pests of economic significance, such as fruit flies.
 - Contracting parties state that in the case of significant non-compliances they will put emergency measures in place in accordance with ISPM 13: *Guidelines for the notification of non-compliance and emergency action*.
 - Some contracting parties are subject to the modification of phytosanitary measures at the regional level and are not required to undertake this activity at the national level.
 - Several contracting parties state there is a limitation of modification of phytosanitary measures in a short period of time due to the availability of financial and human resources to perform this activity, complicated administrative processes and the requirement for pest risk analysis to technically justify the modification.
- 32) *Pest status information is developed, maintained and made available (Art. VII, 2j)*
- Contracting parties state pest status information is available in different ways, including lists of pests and individual pest statuses for regulated pests of economic significance on national websites, lists on the IPP and generation of awareness material.

- Several contracting parties are aware they aren't undertaking this obligation to the best of their ability and intend to improve adherence in accordance with ISPM 8: *Determination of pest status in an area*, in the future.
- Some contracting parties report that they do not develop pest status information at all due to insufficient financial and human resources to perform this activity, including surveillance, pest diagnostics and formal reporting of pest status.

International cooperation

The obligations relating to international cooperation are set out in Article VIII of the Convention. This relates to obligations regarding participation in international pest campaigns, the provision of biological information for pest risk analysis, designation of a contact point on the IPP and cooperating in the exchange of information relating to pest occurrence, outbreak or spread to contracting parties who may be affected.

The obligations relating to international cooperation vary in implementation, ranging from very high to low, with several contracting parties reporting no implementation at all. The majority of contracting parties responded with a moderate to very high degree of implementation for having a designated contact point on the IPP. There is more varied implementation for providing biological information for pest risk analysis and cooperating in the exchange of information relating to pest occurrence, outbreak or spread to contracting parties who may be affected. The lowest implementation for this section relates to participation in international pest campaigns (Table 6).

Table 6: Responding contracting parties answers to *International cooperation* questions

Question (33-36)	Very high	High	Moderate	Low	None
Participation in international campaigns for combating pests that may seriously threaten crop protection (Art. VIII, 1b)	16	27	29	12	6
Providing technical and biological information for pest risk analysis (Art. VIII, 1c)	21	27	24	13	6
Your country has designated a contact point and posted on the IPP (Art. VIII, 2)	49	25	9	3	3
Cooperating in the exchange of information – particularly the reporting of the occurrence, outbreak or spread of pests that may be of immediate or potential danger (Art. VIII, 1a)	26	21	29	11	3

The summary of comments received for implementation of *International cooperation* include:

33) Participation in international campaigns for combating pests that may seriously threaten crop protection (Art. VIII, 1b)

- Contracting parties report participation in campaigns for combatting pests on a bilateral, regional or international basis, through either a regional plant protection organization (RPPO), regional economic community (REC) or FAO technical cooperation programme.
- Some contracting parties state their participation in campaigns is limited to the exchange of information with trading partners and neighbouring countries.
- Contracting parties report the limitation with participating in campaigns are insufficient financial and human resources, however when funding to participate is available they will do so.

34) *Providing technical and biological information for pest risk analysis (Art. VIII, 1c)*

- Contracting parties state they provide information that is available to trading partners on request for pest risk analysis purposes, including biological information of plant species and their associated pests.
- Several contracting parties state they don't provide any biological information, as requests have not been made or they rely on information that is available in the public domain.
- Contracting parties report the limitation with providing biological information is due to an excessive number of requests, or requests that are received are too broad, and they have insufficient financial and human resources to meet all requests.

35) *Your country has designated a contact point and posted it on the IPP (Art. VIII, 2)*

- The majority of contracting parties report they have a designated IPPC official contact point and these details are included on their country webpage on the IPP.

36) *Cooperating in the exchange of information – particularly the reporting of the occurrence, outbreak or spread of pests that may be of immediate or potential danger (Art. VIII, 1a)*

- Contracting parties state the reporting of the occurrence, outbreak or spread of pests is done at the national, regional and international level, including on the IPP.
- Some contracting parties state that reporting is only done on request from other contracting parties who seek this information or not at all.
- Contracting parties state the limitation on reporting this information is due to administrative and communication barriers encountered at the national level and regional levels.

International standards

The 2016 General Survey sought information from contracting parties on their implementation of each ISPM, including respective diagnostic protocols and phytosanitary treatments as annexes, how they prioritize ISPMs in relation to national importance and factors contributing to implementation.

Contracting parties were provided a list of IPPC's 37 ISPMs and asked to rate their countries' degree of implementation for each ISPM from the following ratings:

- High implementation;
- Moderate implementation;
- Low implementation;
- None; and
- Not applicable.

Detailed results of the implementation rating of all ISPMs are included in Annex 2, Table 17.

ISPMs ranked as "Moderate to high implementation"

ISPMs that responding contracting parties ranked with the highest implementation (where over 75% of respondents ranked the ISPM as "Moderate to high implementation") are listed in Table 7 below, showing the top ten ISPMs ranked at this rating. The main factors contributing to the ranking of these ISPMs as moderate to high implementation are included in order from most frequently selected to least.

The factors contributing to successful implementation listed by contracting parties, in order of importance, include having access to sufficient support for financial resources, having support for long term policies and operational plans and access to sufficient facilities.

Table 7: Most implemented ISPMs by contracting parties (>75% rating of moderate to high implementation)

ISPM	Response (percent)*	Key factors contributing to implementation
ISPM 12: <i>Phytosanitary certificates</i>	96.6%	Sufficient qualified personnel (87.9%) Simple to implement (87.5%) Good communication and coordination among stakeholders (83.9%) Sufficient facilities (82.7%) Sufficient infrastructure (80.4%)
ISPM 5: <i>Glossary of phytosanitary terms</i>	95.4%	Simple to implement (93%) Sufficient qualified personnel (90.7%) Sufficient infrastructure (84%) Good communication and coordination among stakeholders (79.6%) Sufficient support for financial resources (77.4%) Sufficient facilities (77.1%)
ISPM 7: <i>Phytosanitary certification system</i>	94.4%	Good communication and coordination among stakeholders (83%) Simple to implement (80%) Sufficient qualified personnel (78%) Sufficient infrastructure (77.6%) Sufficient facilities (76.4%)
ISPM 1: <i>Phytosanitary principles for the protection of plants and the application of phytosanitary measures in international trade</i>	92.1%	Good communication and coordination among stakeholders (76.4%) Simple to implement (75.6%)
ISPM 23: <i>Guidelines for inspection</i>	91%	Simple to implement (81.1%) Good communication and coordination among stakeholders (80%) Sufficient qualified personnel (75.4%) Sufficient infrastructure (73.2%) Sufficient facilities (68.5%) Sufficient support for financial resources (67.3%)
ISPM 20: <i>Guidelines for a phytosanitary import regulatory system</i>	86.4%	Simple to implement (78.8%) Good communication and coordination among stakeholders (75%) Sufficient qualified personnel (72.4%) Support for long term policies and operational plans (71.4%) Sufficient infrastructure (70.9%) Sufficient facilities (67.3%)
ISPM 6: <i>Guidelines for surveillance</i>	85.2%	Simple to implement (74.1%) Good communication and coordination among stakeholders (67.9%) Support for long term policies and operational plans (66.7%) Sufficient facilities (63.2%) Sufficient infrastructure (62.5%)
ISPM 13: <i>Guidelines for the notification of non-compliance and emergency action</i>	77.5%	Sufficient qualified personnel (80%) Simple to implement (78.8%) Good communication and coordination among stakeholders (78.4%) Sufficient facilities (75%) Sufficient support for financial resources (71.1%) Sufficient infrastructure (71.1%)
ISPM 2: <i>Framework for pest risk analysis</i>	77.4%	Good communication and coordination among stakeholders (67.9%) Sufficient facilities (56.9%) Support for long term policies and operational plans (54.9%)

ISPM 15: <i>Regulation of wood packaging material in international trade</i>	77.3%	Good communication and coordination among stakeholders (72.5%) Simple to implement (69.8%) Sufficient infrastructure (69.8%) Sufficient qualified personnel (69.1%) Sufficient facilities (68.6%)
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* Moderate to high implementation rated by >75% responding contracting parties.

ISPMs ranked as “Low implementation”

ISPMs that responding contracting parties ranked with the lowest implementation (where over 35% of respondents ranked the ISPM as “*Low implementation*”) are listed in Table 8 below, showing the top ten ISPMs ranked at this rating. The main factors contributing to the ranking of these ISPMs as low implementation are included below in order from most frequently selected to least.

The factors contributing to challenges in implementation listed by contracting parties, in order of importance, include having access to sufficient support for financial resources, having support for long term policies and operational plans and access to sufficient facilities.

Table 8: Least implemented ISPMs by contracting parties (>35% rating of low implementation)

ISPM	Response (percent)*	Key factors contributing to implementation
ISPM 18: <i>Guidelines for the use of irradiation as a phytosanitary measure</i>	39.4%	Support for long term policies and operational plans (30.4%) Sufficient support for financial resources (24%) Sufficient facilities (24%)
ISPM 33: <i>Pest free potato (Solanum spp.) micropropagative material and minitubers for international trade</i>	45.1%	Sufficient facilities (43.2%) Sufficient support for financial resources (40%) Support for long term policies and operational plans (37.2%)
ISPM 22: <i>Requirements for the establishment of areas of low pest prevalence</i>	39.3%	Sufficient support for financial resources (44%) Support for long term policies and operational plans (42.2%)
ISPM 34: <i>Design and operation of post-entry quarantine stations for plants</i>	41.8%	Sufficient support for financial resources (37%)
ISPM 37: <i>Determination of host status of fruit to fruit flies (Tephritidae)</i>	39%	Support for long term policies and operational plans (40%) Sufficient support for financial resources (36.2%)
ISPM 29: <i>Recognition of pest free areas and areas of low pest prevalence</i>	36.1%	Sufficient support for financial resources (44%) Sufficient facilities (42.3%)
ISPM 30: <i>Establishment of areas of low pest prevalence for fruit flies (Tephritidae)</i>	36%	Sufficient infrastructure (40.4%) Support for long term policies and operational plans (37.2%) Sufficient facilities (35.6%) Sufficient support for financial resources (30.4%)

*Percentage (%) of responding contracting parties rating the ISPM with low implementation.

ISPMs ranked as not implemented

ISPMs that responding contracting parties ranked as not implemented (where over 20% of respondents ranked the ISPM as “*None*”) are listed in Table 9 below.

Table 9: ISPMs rated with nil implementation by contracting parties (>20% rating of nil implementation)

ISPM	Response rate (percent)
ISPM 18: <i>Guidelines for the use of irradiation as a phytosanitary measure</i>	48.4%
ISPM 26: <i>Establishment of pest free areas for fruit flies (Tephritidae)</i>	30.1%
ISPM 33: <i>Pest free potato (Solanum spp.) micropropagative material and minitubers for international trade</i>	27.1%
ISPM 30: <i>Establishment of areas of low pest prevalence for fruit flies (Tephritidae)</i>	26.5%
ISPM 22: <i>Requirements for the establishment of areas of low pest prevalence</i>	25.6%
ISPM 35: <i>Systems approach for pest risk management of fruit flies (Tephritidae)</i>	21.3%
ISPM 34: <i>Design and operation of post-entry quarantine stations for plants</i>	21.2%
ISPM 28: <i>Phytosanitary treatments for regulated pests</i>	20.8%
ISPM 29: <i>Recognition of pest free areas and areas of low pest prevalence</i>	20.8%
ISPM 4: <i>Requirements for the establishment of pest free areas</i>	20%

ISPMs ranked as not applicable

ISPMs that responding contracting parties ranked as not applicable (where over 20% of respondents ranked the ISPM as “Not Applicable”) are listed in Table 10 below.

Table 10: ISPMs not considered applicable by contracting parties (>20% rating of non-applicable)

ISPM	Response rate (percent)
ISPM 18: <i>Guidelines for the use of irradiation as a phytosanitary measure</i>	28.9%
ISPM 30: <i>Establishment of areas of low pest prevalence for fruit flies (Tephritidae)</i>	21.8%

ISPMs that contracting parties have received technical assistance for implementing

ISPMs that responding contracting parties have most frequently received technical assistance (for support of implementation) are listed in Table 11 below, showing the top ten ISPMs ranked. This list is not exhaustive. For a complete list of ranked ISPMs that have received the most to the least amount of technical assistance, please refer to Annex 2 Table 18.

Table 11: Top ten ISPMs for which contracting parties are receiving technical assistance

ISPM	Response rate (count)
ISPM 6: <i>Guidelines for surveillance</i> ISPM 23: <i>Guidelines for inspection</i>	23
ISPM 7: <i>Phytosanitary certification system</i>	21
ISPM 12: <i>Phytosanitary certificates</i> ISPM 5: <i>Glossary of phytosanitary terms</i>	19
ISPM 1: <i>Phytosanitary principles for the protection of plants and the application of phytosanitary measures in international trade</i> ISPM 2: <i>Framework for pest risk analysis</i> ISPM 11: <i>Pest risk analysis for quarantine pests</i>	18
ISPM 32: <i>Categorization of commodities according to their pest risk</i>	17
ISPM 15: <i>Regulation of wood packaging material in international trade</i> ISPM 20: <i>Guidelines for a phytosanitary import regulatory system</i>	16

Highest Priority ISPMs to implement

When asked to identify the highest priority ISPMs to implement, responding contracting parties top ten answers can be found in Table 12 below. Detailed results of the implementation prioritization of all ISPMs are included in Annex 2, Table 19.

Table 12: Top ten ISPMs respondents consider as highest priority to implement

ISPM	Response rate (count and percent)
ISPM 11: <i>Pest risk analysis for quarantine pests</i> ISPM 6: <i>Guidelines for surveillance</i>	49 (65%)
ISPM 2: <i>Framework for pest risk analysis</i>	46 (61%)
ISPM 7: <i>Phytosanitary certification system</i> ISPM 23: <i>Guidelines for inspection</i>	41 (55%)
ISPM 15: <i>Regulation of wood packaging material in international trade</i>	40 (53%)
ISPM 12: <i>Phytosanitary certificates</i>	39 (52%)
ISPM 8: <i>Determination of pest status in an area</i> ISPM 20: <i>Guidelines for a phytosanitary import regulatory system</i>	36 (48%)
ISPM 17: <i>Pest reporting</i>	33 (44%)

The priority ranking of ISPMs by responding contracting parties by region are included in Table 13, showing the top ten ISPMs prioritized.

Table 13: Top ten ISPMs regional responders consider as the highest priority to implement

Priority	Regional responses						
	Africa	Asia	Pacific	Europe	LA&C	NE*	NA*
1	ISPM 6	ISPM 2	ISPM 11	ISPM 7	ISPM 6	ISPM 11	ISPM 23
2	ISPM 12	ISPM 23	ISPM 9	ISPM 12	ISPM 15	ISPM 31	-
3	ISPM 2	ISPM 6	ISPM 2	ISPM 8	ISPM 11	ISPM 28	-
4	ISPM 7	ISPM 7	ISPM 6	ISPM 7	ISPM 1	ISPM 9	-
5	ISPM 11	ISPM 11	ISPM 8	ISPM 32	ISPM 2	ISPM 23	-
6	ISPM 23	ISPM 20	ISPM 13	ISPM 2	ISPM 7	ISPM 34	-
7	ISPM 13	ISPM 1	ISPM 1	ISPM 5	ISPM 23	-	-
8	ISPM 15	ISPM 4	ISPM 7	ISPM 17	ISPM 10	-	-
9	ISPM 17	ISPM 17	ISPM 15	ISPM 4	ISPM 12	-	-
10	ISPM 28	ISPM 12	ISPM 19	ISPM 23	ISPM 14	-	-

*Response rates shown when prioritization is made by more than one country.

Diagnostic protocols

The implementation results of diagnostic protocols, as annexes of ISPM 27: *Diagnostic protocols for regulated pests*, have been included as a separate group to provide information on the use of harmonized diagnostic protocols by contracting parties. Results of 'moderate to high' implementation of all ISPM 27 annexed diagnostic protocols are included in Table 14.

Table 14: Implementation of diagnostic protocols (ISPM 27)

Diagnostic protocol (of ISPM 27)	Response rate (percent)
DP01: <i>Thrips palmi</i> Karny	40.7%
DP08: <i>Ditylenchus dipsaci</i> and <i>Ditylenchus destructor</i>	39.1%
DP07: Potato spindle tuber viroid	37.9%
DP03: <i>Trogoderma granarium</i> Everts	36%
DP10: <i>Bursaphelenchus xylophilus</i>	34.5%
DP12: Phytoplasmas	34.5%
DP02: Plum pox virus	33.3%
DP04: <i>Tilletia indica</i> Mitra	32.6%
DP06: <i>Xanthomonas citri</i> subsp. <i>citri</i>	32.2%
DP05: <i>Phyllosticta citricarpa</i> (McAlpine) Aa on fruit	29.9%
DP09: Genus <i>Anastrepha</i> Schiner	25.3%
DP11: <i>Xiphinema americanum sensu</i>	

Phytosanitary treatments

The implementation results of phytosanitary treatments, as annexes of ISPM 28: *Phytosanitary treatments for regulated pests*, have been included as a separate group to provide information on the use of harmonized phytosanitary treatments by contracting parties. Results of 'moderate to high' implementation of all ISPM 28 annexed phytosanitary treatments are included in Table 15.

Table 15: Implementation of phytosanitary treatments (ISPM 28)

Phytosanitary treatment (of ISPM 28)	Response rate (percent)
PT17: Cold treatment for <i>Bactrocera tryoni</i> on <i>Citrus reticulata</i> x <i>C. sinensis</i>	14.9%
PT16: Cold treatment for <i>Bactrocera tryoni</i> on <i>Citrus sinensis</i>	
PT18: Cold treatment for <i>Bactrocera tryoni</i> on <i>Citrus limon</i>	14%
PT21: Vapour heat treatment for <i>Bactrocera melanotus</i> and <i>Bactrocera xanthodes</i> on <i>Carica papaya</i>	12.9%
PT14: Irradiation treatment for <i>Ceratitis capitata</i>	12.8%
PT07: Irradiation treatment for fruit flies of the family Tephritidae (generic)	11.9%
PT15: Vapour heat treatment for <i>Bactrocera cucurbitae</i> on <i>Cucumis melo</i> var. <i>reticulatus</i>	10.5%
PT03: Irradiation treatment for <i>Anastrepha serpentina</i>	9.3%
PT09: Irradiation treatment for <i>Conotrachelus nenuphar</i>	
PT02: Irradiation treatment for <i>Anastrepha obliqua</i>	8.2%
PT06: Irradiation treatment for <i>Cydia pomonella</i>	
PT13: Irradiation treatment for <i>Euscepes postfasciatus</i>	8.1%
PT01: Irradiation treatment for <i>Anastrepha ludens</i>	
PT08: Irradiation treatment for <i>Rhagoletis pomonella</i>	7.1%
PT12: Irradiation treatment for <i>Cylas formicarius elegantulus</i>	
PT05: Irradiation treatment for <i>Bactrocera tryoni</i>	7%
PT04: Irradiation treatment for <i>Bactrocera jarvisi</i>	
PT20: Irradiation treatment for <i>Ostrinia nubilalis</i>	5.9%
PT11: Irradiation treatment for <i>Grapholita molesta</i> under hypoxia	
PT19: Irradiation treatment for <i>Dysmicoccus neobrevipes</i> , <i>Planococcus lilacinus</i> and <i>Planococcus minor</i>	5.8%

CPM recommendations

The 2016 General Survey sought information from contracting parties on their implementation of each CPM recommendation. Contracting parties were provided a list of the CPM recommendations and asked to rate their countries' degree of implementation for each from the following ratings:

- High implementation;
- Moderate implementation;
- Low implementation;
- None; and
- Not applicable.

Results of 'moderate to high' implementation of all CPM recommendations are included in Table 16 below. Detailed results of the implementation ratings of all CPM recommendations are included in Annex 2, Table 20.

Table 16: Implementation of CPM recommendations

CPM recommendation	Response rate (count and percent)
CPM-1/2006 The Role of IPPC Contact Points	72 (94.7%)
ICPM-2/1999 Recommendation concerning Information Exchange	69 (89.6%)
CPM-11/2016 Recommendation on the Importance of Pest Diagnostics	64 (85.3%)
CPM-3/2008 Replacement or reduction of the use of methyl bromide as a phytosanitary measure	63 (82.9%)
ICPM-1/2005 Threats to Biodiversity posed by Alien Invasive Species: Actions within the Framework of the IPPC	56 (72.7%)
ICPM-3/2001 Recommendations concerning LMOs, Biosecurity and Alien Invasive Species	49 (64.5%)
CPM-10/2015 Recommendation on Sea Containers	45 (61.6%)
CPM-9/2014/2 Internet Trade (E-Commerce) in Plants and other Regulated Articles	44 (58.7%)
CPM-9/2014/1 IPPC Coverage of Aquatic Plants	39 (52%)

Conclusions

The 2016 IPPC General Survey has provided the IPPC Secretariat with a tremendous amount of valuable information relating to contracting parties' implementation of the Convention, ISPMs and CPM recommendations. This can be translated into what contracting parties are doing well and where there is need for improvement.

In total 100 contracting parties responded to this survey, which equates to a 55% response rate and an additional response received from one RPPO (11% response rate). The response rates by region varied greatly, from 33 to 100%. The response rates are not thought to be dependent on language barriers as the survey and survey instructions were translated into the six official languages of the FAO. In addition, several reminders were sent to contracting parties and the submission period was extended.

In general, the responding contracting parties indicated they implement the provisions of the Convention to the best of their ability, based on the financial and human resources, facilities and infrastructure available to them. The obligations associated with trade are the most highly implemented, particularly those relating to export certification and import verification activities. Following export/import implementation, contracting parties rate highly in the obligation of having an established NPPO and an IPPC official contract designated on the IPP.

Some of the fundamental plant health activities that form the basis of phytosanitary systems were not rated as highly as expected, including pest risk analysis and pest surveillance. While some contracting parties implement these well, others report low and none. This can also be seen in the implementation of pest free areas and areas of low pest prevalence, which have a distribution of responses across implementation ratings.

There are no obligations of the Convention that stand out as having extremely low implementation. The obligation to conduct research and investigation in the field of plant protection has the highest rate of low implementation, with contracting parties commenting this activity is dependent on available resources, which are often lacking.

Implementation of ISPMs by contracting parties, like implementation of the Convention, are most highly ranked for standards relating to export and import activities. However, these implementation ratings do not directly correspond to the prioritization contracting parties assign to ISPMs, which include pest risk analysis standards and surveillance as the most important, followed by export and import related ISPMs and pest status and pest reporting. The prioritization is generally reflected across regions, with a combination of pest risk analysis, surveillance and export and import ISPMs considered the most important.

The factors that contribute to implementation at a moderate to high level and also at a low level are the same across contracting parties. The three most common factors leading to both successes and also challenges, in order of importance, include having access to sufficient support for financial resources, having support for long term policies and operational plans and access to sufficient facilities.

Conversely, the ISPMs that have are the lowest ranked for implementation are those associated with phytosanitary measures and treatments, particularly including standards relating to pest freedom. This directly corresponds with ISPMs that contracting parties don't implement or don't find applicable. Analysed as separate groups, the implementation of diagnostic protocols annexed to ISPM 27 and phytosanitary treatments annexed to ISPM 28 were markedly different. By far diagnostic protocols (40.7-25.3% moderate to high rating) were implemented more than phytosanitary treatments (14.9-5.8% moderate to high rating).

For this survey the IPPC Secretariat included questions on implementation of the recommendations made by CPM to gain insight into how contracting parties implement these after adoption. The results illustrate that most contracting parties make an effort to implement CPM recommendations, with the majority implemented from a very high to moderate level (94.7-52% moderate to high rating).

Feedback on the survey varied from responding participants, however in general it was thought that the survey was very comprehensive. Some contracting parties thought the survey was too long and requested the next survey be shortened and more targeted to specific implementation areas. Contracting parties were also keen to see the results of the survey being used by the IPPC Secretariat, CPM and its subsidiary bodies.

DRAFT

Annex 1: 2016 IPPC General Survey (English)

IPPC General Survey 2016

Section 1: Survey respondent details			
Name:			
Country:			
Section 2: General provisions			
Please rate your country's implementation of key responsibilities and core functions identified in the Convention and provide comments regarding any barriers to implementation.			
Has a single official NPPO been established by your country (Art. IV, 1)?			
Yes	Partially	Only through IPP	No
Please provide further details:			
Has your country published a description of its official NPPO on the International Phytosanitary Portal (IPP) (Art. IV, 4)?			
Yes	Partially	No	
Please provide further details:			
Has your country submitted changes of its official NPPO and informed the IPPC Secretariat, via the IPP (Art. IV, 4)?			
Yes	Partially	No	
Please provide further details:			
Has your country provided a description of its NPPO organization arrangements to another contracting party, on request (Art. IV, 4)?			
Yes	Partially	No	
Please provide further details:			
Section 3: NPPO responsibilities			

<p>Please indicate the extent to which responsibilities of your country are being implemented (in reference to activities undertaken by the NPPO directly or under the authority of the NPPO) and provide comments regarding any barriers to implementation.</p> <p>If any other organization is involved in the implementation of these responsibilities, please also comment.</p>			
Issuance of phytosanitary certificates (Art. IV, 2a)			
High	Moderate	Low	None
Please provide further details:			
Surveillance of plants and their growing environment (Art. IV, 2b)			
High	Moderate	Low	None
Please provide further details:			
Inspection of consignments of plants/plant products moving in international traffic (Art. IV, 2c)			
High	Moderate	Low	None
Please provide further details:			
Treatment of consignments (Art. IV, 2d)			
High	Moderate	Low	None
Please provide further details:			
Protection of endangered areas (Art. IV, 2e)			
High	Moderate	Low	None
Please provide further details:			
Designation, maintenance and surveillance of pest free areas and areas of low pest prevalence (Art. IV, 2e)			
High	Moderate	Low	None
Please provide further details:			

Conduct of pest risk analysis (Art. IV, 2f)				
High	Moderate	Low	None	
Please provide further details:				
Phytosanitary security of consignments ensured through appropriate procedures (Art. IV, 2g)				
High	Moderate	Low	None	
Please provide further details:				
Staff development and training (Art. IV, 2h)				
High	Moderate	Low	None	
Please provide further details:				
Section 4 : Distribution of information				
Please rate your country's implementation of key responsibilities and core functions identified in the Convention, concerning distribution of information and provide comments regarding any barriers to implementation.				
Distribution of information regarding regulated pests and the means for their prevention and control (Art. IV, 3a)				
Very high	High	Moderate	Low	None
Please provide further details:				
Research and investigation in the field of plant protection (Art. IV, 3b)				
Very high	High	Moderate	Low	None
Please provide further details:				

Issuance of phytosanitary regulations (Art. IV, 3c)				
Very high	High	Moderate	Low	None
Please provide further details:				
Performance of other such functions as may be required by the Convention (Art. IV, 3d)				
Very high	High	Moderate	Low	None
Please provide further details:				
Section 5: Phytosanitary certification				
Please rate your country's implementation of key responsibilities and core functions identified in the Convention, Article V, concerning phytosanitary certification and provide comments regarding any barriers to implementation.				
Arrangements are in place to enable phytosanitary certification (Art. V, 1)				
Very high	High	Moderate	Low	None
Please provide further details:				
Issuance of phytosanitary certificates are based on inspection and related activities (Art. V, 2)				
Very high	High	Moderate	Low	None
Please provide further details:				
Phytosanitary certificates are issued by public officers who are technically qualified and duly authorized by the official NPPO (Art. V, 2a)				
Very high	High	Moderate	Low	None
Please provide further details:				
The requirements for additional declarations are limited to those that are technically justified (Art. V, 2a)				
Very high	High	Moderate	Low	None

Please provide further details:				
Section 6: Requirements in relation to imports				
Please rate country's implementation of key responsibilities and core functions identified in the Convention, Article IV and VII, concerning requirements in relation to imports and provide comments regarding any barriers to implementation.				
Pest risk analysis is conducted (Art. IV, 2f)				
Very high	High	Moderate	Low	None
Please provide further details:				
Phytosanitary measures are technically justified (Art. VII, 2a)				
Very high	High	Moderate	Low	None
Please provide further details:				
Phytosanitary requirements, restrictions and prohibitions are publicly available to contracting parties (Art. VII, 2b)				
Very high	High	Moderate	Low	None
Please provide further details:				
Designated points of entry are publicly available to contracting parties (Art. VII, 2d)				
Very high	High	Moderate	Low	None
Please provide further details:				
Inspection and other phytosanitary procedures take place as promptly as possible (Art. VII, 2e)				
Very high	High	Moderate	Low	None
Please provide further details:				

Inspection and other phytosanitary procedures are prioritized and performed with due regard to their perishability (Art. VII, 2e)				
Very high	High	Moderate	Low	None
Please provide further details:				
Exporting contracting parties are notified of significant cases of non-compliance with phytosanitary certification i.e. detection of a regulated pest, deficiencies or absence of a certificate (Art. VII, 2f)				
Very high	High	Moderate	Low	None
Please provide further details:				
Your country investigates significant cases of non-compliance that are reported by an importing contracting party (Art. VII, 2f)				
Very high	High	Moderate	Low	None
Please provide further details:				
The result of investigations of significant cases of non-compliance are reported to the importing contracting party concerned (Art. VII, 2f)				
Very high	High	Moderate	Low	None
Please provide further details:				
Phytosanitary measures are modified promptly when technically justified to address phytosanitary risk (Art. VII, 2g & h)				
Very high	High	Moderate	Low	None
Please provide further details:				
Pest status information is developed, maintained and made available (Art. VII, 2j)				
Very high	High	Moderate	Low	None
Please provide further details:				

Section 7: International cooperation				
Please rate your country's implementation of key responsibilities and core functions identified in the Convention, Article VIII, concerning international cooperation and provide comments regarding any barriers to implementation..				
Participation in international campaigns for combating pests that may seriously threaten crop protection (Art. VIII, 1b)				
Very high	High	Moderate	Low	None
Please provide further details:				
Providing technical and biological information for pest risk analysis (Art. VIII, 1c)				
Very high	High	Moderate	Low	None
Please provide further details:				
Your country has designated and posted on the IPP (Art. VIII, 2)				
Very high	High	Moderate	Low	None
Please provide further details:				
Cooperating in the exchange of information – particularly the reporting of the occurrence, outbreak or spread of pests that may be of immediate or potential danger (Art. VIII, 1a)				
Very high	High	Moderate	Low	None
Please provide further details:				
Section 8: International Standards for Phytosanitary Measures (ISPMs)				
Please rate your country's implementation of the ISPMs adopted by the CPM.				
ISPM 1: Phytosanitary principles for the protection of plants and the application of phytosanitary measures in international trade				

High	Moderate	Low	None	Not applicable
ISPM 2: Framework for pest risk analysis				
High	Moderate	Low	None	Not applicable
ISPM 3: Guidelines for the export, shipment, import and release of biological control agents and other beneficial organisms				
High	Moderate	Low	None	Not applicable
ISPM 4: Requirements for the establishment of pest free areas				
High	Moderate	Low	None	Not applicable
ISPM 5: Glossary of phytosanitary terms				
High	Moderate	Low	None	Not applicable
ISPM 6: Guidelines for surveillance				
High	Moderate	Low	None	Not applicable
ISPM 7: Phytosanitary certification system				
High	Moderate	Low	None	Not applicable
ISPM 8: Determination of pest status in an area				
High	Moderate	Low	None	Not applicable
ISPM 9: Guidelines for pest eradication programmes				
High	Moderate	Low	None	Not applicable
ISPM 10: Requirements for the establishment of pest free places of production and pest free production sites				
High	Moderate	Low	None	Not applicable
ISPM 11: Pest risk analysis for quarantine pests				
High	Moderate	Low	None	Not applicable
ISPM 12: Phytosanitary certificates				
High	Moderate	Low	None	Not applicable
ISPM 13: Guidelines for the notification of non-compliance and emergency action				
High	Moderate	Low	None	Not applicable
ISPM 14: The use of integrated measures in a systems approach for pest risk management				
High	Moderate	Low	None	Not applicable

ISPM 15: Regulation of wood packaging material in international trade				
High	Moderate	Low	None	Not applicable
ISPM16: Regulated non-quarantine pests: concept and application				
High	Moderate	Low	None	Not applicable
ISPM 17: Pest reporting				
High	Moderate	Low	None	Not applicable
ISPM 18: Guidelines for the use of irradiation as a phytosanitary measure				
High	Moderate	Low	None	Not applicable
ISPM 19: Guidelines on lists of regulated pests				
High	Moderate	Low	None	Not applicable
ISPM 20: Guidelines for a phytosanitary import regulatory system				
High	Moderate	Low	None	Not applicable
ISPM 21: Pest risk analysis for regulated non-quarantine pests				
High	Moderate	Low	None	Not applicable
ISPM 22: Requirements for the establishment of areas of low pest prevalence				
High	Moderate	Low	None	Not applicable
ISPM 23: Guidelines for inspection				
High	Moderate	Low	None	Not applicable
ISPM 24: Guidelines for the determination and recognition of equivalence of phytosanitary measures				
High	Moderate	Low	None	Not applicable
ISPM 25: Consignments in transit				
High	Moderate	Low	None	Not applicable
ISPM 26: Establishment of pest free areas for fruit flies (Tephritidae)				
High	Moderate	Low	None	Not applicable
ISPM 27: Diagnostic protocols for regulated pests				
High	Moderate	Low	None	Not applicable
DP 01: <i>Thrips palmi</i> Karney				

High	Moderate	Low	None	Not applicable
DP02: Plum pox virus				
High	Moderate	Low	None	Not applicable
DP03: <i>Trogoderma granarium</i> Everts				
High	Moderate	Low	None	Not applicable
DP04: <i>Tilletia indica</i> Mitra				
High	Moderate	Low	None	Not applicable
DP05: <i>Phyllosticta citricarpa</i> (McAlpine) Aa on fruit				
High	Moderate	Low	None	Not applicable
DP06: <i>Xanthomonas citri</i> subsp. <i>citri</i>				
High	Moderate	Low	None	Not applicable
DP07: Potato spindle tuber viroid				
High	Moderate	Low	None	Not applicable
DP08: <i>Ditylenchus dipsaci</i> and <i>Ditylenchus destructor</i>				
High	Moderate	Low	None	Not applicable
DP09: Genus <i>Anastrepha</i> Schiner				
High	Moderate	Low	None	Not applicable
DP10: <i>Bursaphelenchus xylophilus</i>				
High	Moderate	Low	None	Not applicable
DP11: <i>Xiphinema americanum sensu lato</i>				
High	Moderate	Low	None	Not applicable
DP12: Phytoplasmas				
High	Moderate	Low	None	Not applicable
ISPM 28: Phytosanitary treatments for regulated pests				
High	Moderate	Low	None	Not applicable
PT01: Irradiation treatment for <i>Anastrepha ludens</i>				
High	Moderate	Low	None	Not applicable

PT02: Irradiation treatment for <i>Anastrepha obliqua</i>				
High	Moderate	Low	None	Not applicable
PT03: Irradiation treatment for <i>Anastrepha serpentina</i>				
High	Moderate	Low	None	Not applicable
PT04: Irradiation treatment for <i>Bactrocera jarvisi</i>				
High	Moderate	Low	None	Not applicable
PT05: Irradiation treatment for <i>Bactrocera tryoni</i>				
High	Moderate	Low	None	Not applicable
PT06: Irradiation treatment for <i>Cydia pomonella</i>				
High	Moderate	Low	None	Not applicable
PT07: Irradiation treatment for fruit flies of the family Tephritidae (generic)				
High	Moderate	Low	None	Not applicable
PT08: Irradiation treatment for <i>Rhagoletis pomonella</i>				
High	Moderate	Low	None	Not applicable
PT09: Irradiation treatment for <i>Conotrachelus nenuphar</i>				
High	Moderate	Low	None	Not applicable
PT10: Irradiation treatment for <i>Grapholita molesta</i>				
High	Moderate	Low	None	Not applicable
PT11: Irradiation treatment for <i>Grapholita molesta</i> under hypoxia				
High	Moderate	Low	None	Not applicable
PT12: Irradiation treatment for <i>Cyclas formicarius elegantulus</i>				
High	Moderate	Low	None	Not applicable
PT13: Irradiation treatment for <i>Eusepes postfasciatus</i>				
High	Moderate	Low	None	Not applicable
PT14: Irradiation treatment for <i>Ceratitis capitata</i>				
High	Moderate	Low	None	Not applicable
PT15: Vapour heat treatment for <i>Bactrocera cucurbitae</i> on <i>Cucumis melo</i> var. <i>reticulatus</i>				
High	Moderate	Low	None	Not applicable

PT16: Cold treatment for <i>Bactrocera tryoni</i> on <i>Citrus sinensis</i>				
High	Moderate	Low	None	Not applicable
PT17: Cold treatment for <i>Bactrocera tryoni</i> on <i>Citrus reticulata</i> x <i>C. sinensis</i>				
High	Moderate	Low	None	Not applicable
PT18: Cold treatment for <i>Bactrocera tryoni</i> on <i>Citrus limon</i>				
High	Moderate	Low	None	Not applicable
PT19: Irradiation treatment for <i>Bactrocera melanotus</i> and <i>Bactrocera xanthodes</i> on <i>Carica papaya</i>				
High	Moderate	Low	None	Not applicable
PT20: Irradiation treatment for <i>Ostrinia nubilalis</i>				
High	Moderate	Low	None	Not applicable
PT21: Vapour heat treatment for <i>Bactrocera melanotus</i> and <i>Bactrocera xanthodes</i> on <i>Carica papaya</i>				
High	Moderate	Low	None	Not applicable
ISPM 29: Recognition of pest free areas and areas of low pest prevalence				
High	Moderate	Low	None	Not applicable
ISPM 30: Establishment of areas of low pest prevalence for fruit flies (Tephritidae)				
High	Moderate	Low	None	Not applicable
ISPM 31: Methodologies for sampling consignments				
High	Moderate	Low	None	Not applicable
ISPM 32: Categorization of commodities according to their pest risk				
High	Moderate	Low	None	Not applicable
ISPM 33: Pest free potato (<i>Solanum</i> spp.) micropropagative material and minitubers for international trade				
High	Moderate	Low	None	Not applicable
ISPM 34: Design and operation of post-entry quarantine stations for plants				
High	Moderate	Low	None	Not applicable
ISPM 35: Systems approaches for pest management of fruit flies (Tephritidae)				
High	Moderate	Low	None	Not applicable
ISPM 36: Integrated measures for plants for planting				

High	Moderate	Low	None	Not applicable
ISPM 37: Determination of host status of fruit to fruit flies (Tephritidae)				
High	Moderate	Low	None	Not applicable

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Section 9: Factors contributing to the implementation of International Standards for Phytosanitary Measures (ISPMs)										
Please select the key factors that support or hinder your country's implementation of the ISPMs adopted by the CPM.										
Please answer the question using a Yes (Y) or No (N) response.										
ISPMs	Key factors contributing to degree of implementation									
	The ISPM has a low level of relevance	The ISPM has a moderate or high level of relevance	The ISPM is simple to implement	There are sufficient qualified personnel supporting the implementation of this ISPM	There is sufficient financial resources supporting the implementation of this ISPM (e.g. budget or funding)	There is sufficient infrastructure supporting the implementation of this ISPM	There are sufficient facilities supporting the implementation of this ISPM	There is good communication and coordination among stakeholders	Long term supporting policies and operational plans exist	Technical assistance to support implementation of this ISPM has been received in the last 5 years
ISPM 1: Phytosanitary principles for the protection of plants and the application of phytosanitary measures in international trade										
ISPM 2: Framework for pest risk analysis										
ISPM 3: Guidelines for the export, shipment, import and release of biological control agents and other beneficial organisms										
ISPM 4: Requirements for the establishment of pest free areas										
ISPM 5: Glossary of phytosanitary terms										
ISPM 6: Guidelines for surveillance										
ISPM 7: Phytosanitary certification system										
ISPM 8: Determination of pest status in an area										
ISPM 9: Guidelines for pest eradication programmes										

ISPM 10: Requirements for the establishment of pest free places of production and pest free production sites											
ISPM 11: Pest risk analysis for quarantine pests											
ISPM 12: Phytosanitary certificates											
ISPM 13: Guidelines for the notification of non-compliance and emergency action											
ISPM 14: The use of integrated measures in a systems approach for pest risk management											
ISPM 15: Regulation of wood packaging material in international trade											
ISPM16: Regulated non-quarantine pests: concept and application											
ISPM 17: Pest reporting											
ISPM 18: Guidelines for the use of irradiation as a phytosanitary measure											
ISPM 19: Guidelines on lists of regulated pests											
ISPM 20: Guidelines for a phytosanitary import regulatory system											

ISPM 21: Pest risk analysis for regulated non-quarantine pests											
ISPM 22: Requirements for the establishment of areas of low pest prevalence											
ISPM 23: Guidelines for inspection											
ISPM 24: Guidelines for the determination and recognition of equivalence of phytosanitary measures											
ISPM 25: Consignments in transit											
ISPM 26: Establishment of pest free areas for fruit flies (Tephritidae)											
ISPM 27: Diagnostic protocols for regulated pests											
DP 01: <i>Thrips palmi</i> Karney											
DP02: Plum pox virus											
DP03: <i>Trogoderma granarium</i> Everts											
DP04: <i>Tilletia indica</i> Mitra											
DP05: <i>Phyllosticta citricarpa</i> (McAlpine) Aa on fruit											
DP06: <i>Xanthomonas citri</i> subsp. <i>citri</i>											

DP07: Potato spindle tuber viroid										
DP08: <i>Ditylenchus dipsaci</i> and <i>Ditylenchus destructor</i>										
DP09: Genus <i>Anastrepha</i> Schiner										
DP10: <i>Bursaphelenchus xylophilus</i>										
DP11: <i>Xiphinema americanum sensu lato</i>										
DP12: Phytoplasmas										
ISPM 28: Phytosanitary treatments for regulated pests										
PT01: Irradiation treatment for <i>Anastrepha ludens</i>										
PT02: Irradiation treatment for <i>Anastrepha obliqua</i>										
PT03: Irradiation treatment for <i>Anastrepha serpentina</i>										
PT04: Irradiation treatment for <i>Bactrocera jarvisi</i>										
PT05: Irradiation treatment for <i>Bactrocera tryoni</i>										
PT06: Irradiation treatment for <i>Cydia pomonella</i>										
PT07: Irradiation treatment for fruit flies of the family Tephritidae (generic)										

PT08: Irradiation treatment for <i>Rhagoletis pomonella</i>											
PT09: Irradiation treatment for <i>Conotrachelus nenuphar</i>											
PT10: Irradiation treatment for <i>Grapholita molesta</i>											
PT11: Irradiation treatment for <i>Grapholita molesta</i> under hypoxia											
PT12: Irradiation treatment for <i>Cyclas formicarius elegantulus</i>											
PT13: Irradiation treatment for <i>Eusepes postfasciatus</i>											
PT14: Irradiation treatment for <i>Ceratitis capitata</i>											
PT15: Vapour heat treatment for <i>Bactrocera cucurbitae</i> on <i>Cucumis melo</i> var. <i>reticulatus</i>											
PT16: Cold treatment for <i>Bactrocera tryoni</i> on <i>Citrus sinensis</i>											
PT17: Cold treatment for <i>Bactrocera tryoni</i> on <i>Citrus reticulata</i> x <i>C. sinensis</i>											
PT18: Cold treatment for <i>Bactrocera tryoni</i> on <i>Citrus limon</i>											

PT19: Irradiation treatment for <i>Bactrocera melanotus</i> and <i>Bactrocera xanthodes</i> on <i>Carica papaya</i>										
PT20: Irradiation treatment for <i>Ostrinia nubilalis</i>										
PT21: Vapour heat treatment for <i>Bactrocera melanotus</i> and <i>Bactrocera xanthodes</i> on <i>Carica papaya</i>										
ISPM 29: Recognition of pest free areas and areas of low pest prevalence										
ISPM 30: Establishment of areas of low pest prevalence for fruit flies (Tephritidae)										
ISPM 31: Methodologies for sampling consignments										
ISPM 32: Categorization of commodities according to their pest risk										
ISPM 33: Pest free potato (<i>Solanum</i> spp.) micropropagative material and minitubers for international trade										
ISPM 34: Design and operation of post-entry quarantine stations for plants										

ISPM 35: Systems approaches for pest management of fruit flies (Tephritidae)										
ISPM 36: Integrated measures for plants for planting										
ISPM 37: Determination of host status of fruit to fruit flies (Tephritidae)										

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Section 10: Challenges to implementing the most relevant International Standards for Phytosanitary Measures (ISPMs)

Please identify the ISPMs you consider to be highest priority for your country to implement (as many as necessary).

Please identify three main challenges your country faces for implementing these high priority ISPMs.

- ISPM 1: *Phytosanitary principles for the protection of plants and the application of phytosanitary measures in international trade*
- ISPM 2: *Framework for pest risk analysis*
- ISPM 3: *Guidelines for the export, shipment, import and release of biological control agents and other beneficial organisms*
- ISPM 4: *Requirements for the establishment of pest free areas*
- ISPM 5: *Glossary of phytosanitary terms (as adopted by CPM-11)*
- ISPM 6: *Guidelines for surveillance*
- ISPM 7: *Phytosanitary certification system*
- ISPM 8: *Determination of pest status in an area*
- ISPM 9: *Guidelines for pest eradication programmes*
- ISPM 10: *Requirements for the establishment of pest free places of production and pest free production sites*
- ISPM 11: *Pest risk analysis for quarantine pests*
- ISPM 12: *Phytosanitary certificates*
- ISPM 13: *Guidelines for the notification of non-compliance and emergency action*
- ISPM 14: *The use of integrated measures in a systems approach for pest risk management*
- ISPM 15: *Regulation of wood packaging material in international trade*
- ISPM 16: *Regulated non-quarantine pests: concept and application*
- ISPM 17: *Pest reporting*
- ISPM 18: *Guidelines for the use of irradiation as a phytosanitary measure*
- ISPM 19: *Guidelines on lists of regulated pests*
- ISPM 20: *Guidelines for a phytosanitary import regulatory system*
- ISPM 21: *Pest risk analysis for regulated non quarantine pests*
- ISPM 22: *Requirements for the establishment of areas of low pest prevalence*
- ISPM 23: *Guidelines for inspection*
- ISPM 24: *Guidelines for the determination and recognition of equivalence of phytosanitary measures*
- ISPM 25: *Consignments in transit*
- ISPM 26: *Establishment of pest free areas for fruit flies (Tephritidae)*
- ISPM 27: *Diagnostic protocols for regulated pests*
- ISPM 28: *Phytosanitary treatments for regulated pests*

- ISPM 29: *Recognition of pest free areas and areas of low pest prevalence*
- ISPM 30: *Establishment of areas of low pest prevalence for fruit flies (Tephritidae)*
- ISPM 31: *Methodologies for sampling of consignments*
- ISPM 32: *Categorization of commodities according to their pest risk*
- ISPM 33: *Pest free potato (Solanum spp.) micropropagative material and minitubers for international trade*
- ISPM 34: *Design and operation of post-entry quarantine stations for plants*
- ISPM 35: *Systems approach for pest risk management of fruit flies (Tephritidae)*
- ISPM 36: *Integrated measures for plants for planting*
- ISPM 37: *Determination of host status of fruit to fruit flies (Tephritidae)*

Highest priority ISPMs for your country to implement:

Challenge one:

Challenge two:

Challenge three:

Section 11: Implementation of Commission on Phytosanitary Measures (CPM) recommendations

Please rate your country's implementation of CPM recommendations and provide comments regarding any barriers to implementation.

ICPM-2/1999 Recommendation concerning Information Exchange

Very high	High	Moderate	Low	None
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Please provide further details:

ICPM-3/2001 Recommendations concerning LMOs, Biosecurity and Alien Invasive Species

Very high	High	Moderate	Low	None
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Please provide further details:

ICPM-1/2005 Threats to Biodiversity posed by Alien Invasive Species: Actions within the Framework of the IPPC

Very high	High	Moderate	Low	None
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Please provide further details:

CPM-1/2006 The Role of IPPC Contact Points

Very high	High	Moderate	Low	None
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Please provide further details:

CPM-3/2008 Replacement or reduction of the use of methyl bromide as a phytosanitary measure

Very high	High	Moderate	Low	None
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Please provide further details:

CPM-9/2014/1 IPPC Coverage of Aquatic Plants

Very high	High	Moderate	Low	None
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Please provide further details:

CPM-9/2014/2 Internet Trade (E-Commerce) in Plants and other Regulated Articles

Very high	High	Moderate	Low	None
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Please provide further details:

CPM-10/2015 Recommendation on Sea Containers				
Very high	High	Moderate	Low	None
Please provide further details:				
CPM-11/2016 Recommendation on the Importance of Pest Diagnostics				
Very high	High	Moderate	Low	None
Please provide further details:				

Section 12: Any other comments
Please expand on your survey questions here if necessary, ensuring you reference the section and question you are providing details for.
Comments:

Annex 2: Detailed survey results

Table 17: Implementation ratings for ISPMs 1-37 (exhaustive results)

Question	High	Moderate	Low	None	NA
ISPM 1: Phytosanitary principles for the protection of plants and the application of phytosanitary measures in international trade	58	24	5	2	0
ISPM 2: Framework for pest risk analysis	43	23	15	8	0
ISPM 3: Guidelines for the export, shipment, import and release of biological control agents and other beneficial organisms	30	33	19	3	5
ISPM 4: Requirements for the establishment of pest free areas	22	30	16	17	5
ISPM 5: Glossary of phytosanitary terms	60	23	3	1	1
ISPM 6: Guidelines for surveillance	38	37	10	3	1
ISPM 7: Phytosanitary certification system	67	17	4	1	1
ISPM 8: Determination of pest status in an area	33	33	15	5	3
ISPM 9: Guidelines for pest eradication programmes	27	32	15	11	4
ISPM 10: Requirements for the establishment of pest free places of production and pest free production sites	28	24	17	15	6
ISPM 11: Pest risk analysis for quarantine pests	42	20	15	10	1
ISPM 12: Phytosanitary certificates	70	15	3	0	2
ISPM 13: Guidelines for the notification of non-compliance and emergency action	39	30	11	9	1
ISPM 14: The use of integrated measures in a systems approach for pest risk management	24	32	22	9	3
ISPM 15: Regulation of wood packaging material in international trade	54	14	13	7	2
ISPM16: Regulated non-quarantine pests: concept and application	29	24	27	6	3
ISPM 17: Pest reporting	32	32	18	6	1
ISPM 18: Guidelines for the use of irradiation as a phytosanitary measure	12	8	13	31	26
ISPM 19: Guidelines on lists of regulated pests	37	29	15	7	2
ISPM 20: Guidelines for a phytosanitary import regulatory system	50	26	10	2	2
ISPM 21: Pest risk analysis for regulated non-quarantine pests	23	23	24	16	3
ISPM 22: Requirements for the establishment of areas of low pest prevalence	16	21	24	21	8
ISPM 23: Guidelines for inspection	52	29	6	2	1

ISPM 24: Guidelines for the determination and recognition of equivalence of phytosanitary measures	25	29	22	8	5
ISPM 25: Consignments in transit	40	23	17	7	3
ISPM 26: Establishment of pest free areas for fruit flies (Tephritidae)	19	16	16	22	17
ISPM 27: Diagnostic protocols for regulated pests	25	24	23	15	2
DP 01: <i>Thrips palmi</i> Karney	19	16	15	22	14
DP02: Plum pox virus	18	11	10	23	24
DP03: <i>Trogoderma granarium</i> Everts	20	13	16	23	15
DP04: <i>Tilletia indica</i> Mitra	16	13	16	22	20
DP05: <i>Phyllosticta citricarpa</i> (McAlpine) Aa on fruit	14	14	12	25	22
DP06: <i>Xanthomonas citri</i> subsp. <i>citri</i>	13	15	16	27	15
DP07: Potato spindle tuber viroid	17	17	10	27	16
DP08: <i>Ditylenchus dipsaci</i> and <i>Ditylenchus destructor</i>	17	18	13	23	15
DP09: Genus <i>Anastrepha</i> Schiner	15	11	15	29	17
DP10: <i>Bursaphelenchus xylophilus</i>	14	17	11	27	17
DP11: <i>Xiphinema americanum sensu lato</i>	14	8	16	28	21
DP12: Phytoplasmas	17	13	17	26	14
ISPM 28: Phytosanitary treatments for regulated pests	28	12	21	16	9
PT01: Irradiation treatment for <i>Anastrepha ludens</i>	5	2	10	32	37
PT02: Irradiation treatment for <i>Anastrepha obliqua</i>	5	2	9	30	39
PT03: Irradiation treatment for <i>Anastrepha serpentine</i>	5	3	8	32	38
PT04: Irradiation treatment for <i>Bactrocera jarvisi</i>	6	0	8	35	37
PT05: Irradiation treatment for <i>Bactrocera tryoni</i>	6	0	8	34	38
PT06: Irradiation treatment for <i>Cydia pomonella</i>	6	1	8	31	39
PT07: Irradiation treatment for fruit flies of the family Tephritidae (generic)	8	2	10	29	35
PT08: Irradiation treatment for <i>Rhagoletis pomonella</i>	5	1	7	30	41
PT09: Irradiation treatment for <i>Conotrachelus nenuphar</i>	6	1	7	30	41
PT10: Irradiation treatment for <i>Grapholita molesta</i>	5	1	8	29	43
PT11: Irradiation treatment for <i>Grapholita molesta</i> under hypoxia	4	1	9	29	43
PT12: Irradiation treatment for <i>Cyclas formicarius elegantulus</i>	5	1	8	32	40
PT13: Irradiation treatment for <i>Euscepes postfasciatus</i>	6	5	8	30	37
PT14: Irradiation treatment for <i>Ceratitidis capitata</i>	6	5	8	30	37
PT15: Vapour heat treatment for <i>Bactrocera cucurbitae</i>	8	3	9	33	33

on <i>Cucumis melo</i> var. <i>reticulatus</i>					
PT16: Cold treatment for <i>Bactrocera tryoni</i> on <i>Citrus sinensis</i>	12	1	9	30	35
PT17: Cold treatment for <i>Bactrocera tryoni</i> on <i>Citrus reticulata</i> x <i>C. sinensis</i>	11	2	8	30	36
PT18: Cold treatment for <i>Bactrocera tryoni</i> on <i>Citrus limon</i>	11	1	8	29	37
PT19: Irradiation treatment for <i>Bactrocera melanotus</i> and <i>Bactrocera xanthodes</i> on <i>Carica papaya</i>	5	0	8	31	42
PT20: Irradiation treatment for <i>Ostrinia nubilalis</i>	4	1	8	31	41
PT21: Vapour heat treatment for <i>Bactrocera melanotus</i> and <i>Bactrocera xanthodes</i> on <i>Carica papaya</i>	7	4	6	32	36
ISPM 29: Recognition of pest free areas and areas of low pest prevalence	17	22	22	16	10
ISPM 30: Establishment of areas of low pest prevalence for fruit flies (Tephritidae)	16	16	18	18	19
ISPM 31: Methodologies for sampling consignments	26	37	17	6	1
ISPM 32: Categorization of commodities according to their pest risk	38	25	16	8	0
ISPM 33: Pest free potato (<i>Solanum</i> spp.) micropropagative material and minitubers for international trade	14	14	23	19	17
ISPM 34: Design and operation of post-entry quarantine stations for plants	20	19	28	18	2
ISPM 35: Systems approaches for pest management of fruit flies (Tephritidae)	22	22	15	16	12
ISPM 36: Integrated measures for plants for planting	28	29	16	11	2
ISPM 37: Determination of host status of fruit to fruit flies (Tephritidae)	18	18	23	12	15

Table 18 – Factors contributing to the implementation of ISPMs (exhaustive results)

ISPM	The ISPM has a low level of relevance	The ISPM has a moderate or high level of relevance	The ISPM is simple to implement	There are sufficient qualified personnel supporting the implementation of this ISPM	There is sufficient financial resources supporting the implementation of this ISPM (e.g. budget or funding)	There is sufficient infrastructure supporting the implementation of this ISPM	There are sufficient facilities supporting the implementation of this ISPM	There is good communication and coordination among stakeholders	Long term supporting policies and operational plans exist	Technical assistance to support implementation of this ISPM has been received in the last 5 years
ISPM 1: Phytosanitary principles for the protection of plants and the application of phytosanitary measures in international trade	Y – 5 N – 53	Y – 59 N – 5	Y – 44 N – 14	Y – 36 N – 24	Y – 31 N – 28	Y – 35 N – 20	Y – 35 N – 20	Y – 42 N – 13	Y – 35 N – 18	Y – 18 N – 32
ISPM 2: Framework for pest risk analysis	Y – 7 N – 47	Y – 51 N – 7	Y – 32 N – 24	Y – 22 N – 36	Y – 22 N – 34	Y – 28 N – 26	Y – 29 N – 22	Y – 36 N – 17	Y – 28 N – 23	Y – 18 N – 31
ISPM 3: Guidelines for the export, shipment, import and release of biological control agents and other beneficial organisms	Y – 15 N – 38	Y – 44 N – 12	Y – 25 N – 27	Y – 33 N – 26	Y – 23 N – 31	Y – 28 N – 26	Y – 23 N – 28	Y – 32 N – 20	Y – 24 N – 24	Y – 10 N – 37

ISPM 4: Requirements for the establishment of pest free areas	Y – 12 N – 43	Y – 46 N – 9	Y – 23 N – 29	Y – 30 N – 25	Y – 24 N – 31	Y – 28 N – 25	Y – 28 N – 24	Y – 35 N – 18	Y – 25 N – 23	Y – 19 N – 29
ISPM 5: Glossary of phytosanitary terms	Y – 9 N – 45	Y – 53 N – 7	Y – 53 N – 4	Y – 49 N – 5	Y – 41 N – 12	Y – 42 N – 8	Y – 37 N – 11	Y – 39 N – 10	Y – 31 N – 17	Y – 19 N – 29
ISPM 6: Guidelines for surveillance	Y – 7 N – 46	Y – 54 N – 8	Y – 43 N – 15	Y – 34 N – 24	Y – 23 N – 33	Y – 35 N – 21	Y – 36 N – 21	Y – 36 N – 17	Y – 34 N – 17	Y – 23 N – 29
ISPM 7: Phytosanitary certification system	Y – 7 N – 48	Y – 57 N – 6	Y – 46 N – 13	Y – 46 N – 13	Y – 41 N – 17	Y – 45 N – 13	Y – 42 N – 13	Y – 44 N – 9	Y – 35 N – 15	Y – 21 N – 28
ISPM 8: Determination of pest status in an area	Y – 8 N – 44	Y – 50 N – 8	Y – 34 N – 21	Y – 35 N – 26	Y – 27 N – 28	Y – 35 N – 20	Y – 30 N – 24	Y – 34 N – 20	Y – 24 N – 23	Y – 14 N – 34
ISPM 9: Guidelines for pest eradication programmes	Y – 8 N – 41	Y – 52 N – 8	Y – 32 N – 20	Y – 30 N – 27	Y – 23 N – 33	Y – 29 N – 21	Y – 26 N – 24	Y – 31 N – 18	Y – 26 N – 21	Y – 11 N – 36
ISPM 10: Requirements for the establishment of pest free places of production and pest free production sites	Y – 11 N – 40	Y – 46 N – 10	Y – 23 N – 29	Y – 35 N – 21	Y – 22 N – 32	Y – 32 N – 21	Y – 26 N – 24	Y – 36 N – 17	Y – 23 N – 24	Y – 10 N – 36
ISPM 11: Pest risk analysis for	Y – 8 N – 44	Y – 50 N – 7	Y – 34 N – 21	Y – 27 N – 30	Y – 22 N – 31	Y – 29 N – 31	Y – 33 N – 18	Y – 36 N – 16	Y – 27 N – 18	Y – 18 N – 30

quarantine pests										
ISPM 12: Phytosanitary certificates	Y – 5 N – 46	Y – 54 N – 6	Y – 49 N – 7	Y – 51 N – 7	Y – 38 N – 16	Y – 45 N – 11	Y – 43 N – 9	Y – 47 N – 9	Y – 37 N – 13	Y – 19 N – 30
ISPM 13: Guidelines for the notification of non-compliance and emergency action	Y – 4 N – 45	Y – 54 N – 5	Y – 41 N – 11	Y – 44 N – 11	Y – 37 N – 15	Y – 37 N – 15	Y – 36 N – 12	Y – 40 N – 11	Y – 27 N – 19	Y – 13 N – 34
ISPM 14: The use of integrated measures in a systems approach for pest risk management	Y – 8 N – 43	Y – 49 N – 10	Y – 30 N – 22	Y – 34 N – 22	Y – 19 N – 33	Y – 31 N – 23	Y – 25 N – 24	Y – 33 N – 20	Y – 20 N – 24	Y – 11 N – 34
ISPM 15: Regulation of wood packaging material in international trade	Y – 7 N – 45	Y – 53 N – 6	Y – 37 N – 16	Y – 38 N – 17	Y – 31 N – 21	Y – 37 N – 16	Y – 35 N – 16	Y – 37 N – 14	Y – 28 N – 22	Y – 16 N – 30
ISPM16: Regulated non-quarantine pests: concept and application	Y – 13 N – 39	Y – 44 N – 12	Y – 28 N – 24	Y – 31 N – 23	Y – 25 N – 27	Y – 30 N – 21	Y – 26 N – 22	Y – 30 N – 19	Y – 23 N – 23	Y – 9 N – 39
ISPM 17: Pest reporting	Y – 6 N – 44	Y – 54 N – 7	Y – 38 N – 14	Y – 41 N – 14	Y – 31 N – 21	Y – 37 N – 15	Y – 38 N – 14	Y – 36 N – 14	Y – 26 N – 19	Y – 12 N – 35
ISPM 18: Guidelines for the use of irradiation as	Y – 28 N – 29	Y – 33 N – 21	Y – 15 N – 32	Y – 16 N – 34	Y – 12 N – 38	Y – 16 N – 34	Y – 11 N – 34	Y – 19 N – 27	Y – 14 N – 32	Y – 8 N – 39

a phytosanitary measure										
ISPM 19: Guidelines on lists of regulated pests	Y – 8 N – 40	Y – 49 N – 8	Y – 33 N – 21	Y – 36 N – 19	Y – 30 N – 22	Y – 33 N – 19	Y – 31 N – 18	Y – 31 N – 19	Y – 28 N – 20	Y – 8 N – 41
ISPM 20: Guidelines for a phytosanitary import regulatory system	Y – 8 N – 41	Y – 50 N – 8	Y – 41 N – 11	Y – 42 N – 16	Y – 34 N – 21	Y – 39 N – 16	Y – 35 N – 17	Y – 39 N – 12	Y – 35 N – 14	Y – 16 N – 31
ISPM 21: Pest risk analysis for regulated non- quarantine pests	Y – 14 N – 37	Y – 43 N – 12	Y – 27 N – 24	Y – 26 N – 28	Y – 22 N – 29	Y – 28 N – 22	Y – 25 N – 23	Y – 30 N – 18	Y – 24 N – 20	Y – 9 N – 38
ISPM 22: Requirement s for the establishe ment of areas of low pest prevalence	Y – 15 N – 36	Y – 41 N – 11	Y – 25 N – 25	Y – 27 N – 24	Y – 21 N – 29	Y – 31 N – 20	Y – 23 N – 24	Y – 28 N – 21	Y – 19 N – 25	Y – 6 N – 38
ISPM 23: Guidelines for inspection	Y – 7 N – 44	Y – 56 N – 6	Y – 43 N – 10	Y – 43 N – 14	Y – 37 N – 18	Y – 41 N – 15	Y – 37 N – 17	Y – 44 N – 11	Y – 33 N – 14	Y – 23 N – 25
ISPM 24: Guidelines for the determinatio n and recognition of equivalence of	Y – 11 N – 38	Y – 46 N – 9	Y – 33 N – 18	Y – 33 N – 18	Y – 26 N – 24	Y – 31 N – 19	Y – 27 N – 20	Y – 28 N – 22	Y – 20 N – 24	Y – 6 N – 36

phytosanitary measures										
ISPM 25: Consignments in transit	Y – 11 N – 37	Y – 49 N – 9	Y – 42 N – 12	Y – 38 N – 16	Y – 33 N – 21	Y – 33 N – 19	Y – 27 N – 22	Y – 34 N – 16	Y – 26 N – 19	Y – 11 N – 35
ISPM 26: Establishment of pest free areas for fruit flies (Tephritidae)	Y – 21 N – 32	Y – 37 N – 16	Y – 22 N – 29	Y – 26 N – 23	Y – 18 N – 31	Y – 23 N – 25	Y – 20 N – 24	Y – 23 N – 23	Y – 20 N – 24	Y – 8 N – 37
ISPM 27: Diagnostic protocols for regulated pests	Y – 8 N – 40	Y – 48 N – 7	Y – 31 N – 19	Y – 32 N – 22	Y – 25 N – 26	Y – 32 N – 20	Y – 28 N – 21	Y – 28 N – 21	Y – 22 N – 22	Y – 11 N – 35
DP 01: <i>Thrips palmi</i> Karney	Y – 13 N – 33	Y – 35 N – 13	Y – 24 N – 17	Y – 25 N – 19	Y – 20 N – 21	Y – 24 N – 20	Y – 21 N – 21	Y – 24 N – 17	Y – 20 N – 18	Y – 12 N – 28
DP02: Plum pox virus	Y – 16 N – 29	Y – 33 N – 13	Y – 22 N – 19	Y – 20 N – 24	Y – 15 N – 26	Y – 20 N – 22	Y – 16 N – 24	Y – 16 N – 22	Y – 14 N – 23	Y – 6 N – 33
DP03: <i>Trogoderma</i> <i>granarium</i> Everts	Y – 9 N – 36	Y – 38 N – 14	Y – 30 N – 16	Y – 31 N – 19	Y – 24 N – 23	Y – 26 N – 21	Y – 22 N – 23	Y – 22 N – 21	Y – 19 N – 23	Y – 10 N – 32
DP04: <i>Tilletia</i> <i>indica</i> Mitra	Y – 14 N – 30	Y – 30 N – 15	Y – 25 N – 18	Y – 23 N – 22	Y – 18 N – 25	Y – 20 N – 23	Y – 16 N – 26	Y – 17 N – 22	Y – 16 N – 23	Y – 8 N – 33
DP05: <i>Phyllosticta</i> <i>citricarpa</i> (McAlpine) <i>Aa on fruit</i>	Y – 18 N – 27	Y – 28 N – 17	Y – 22 N – 19	Y – 17 N – 25	Y – 14 N – 25	Y – 16 N – 25	Y – 13 N – 27	Y – 13 N – 24	Y – 15 N – 23	Y – 5 N – 35
DP06: <i>Xanthomona</i> <i>s citri</i> subsp. <i>citri</i>	Y – 15 N – 31	Y – 34 N – 13	Y – 22 N – 19	Y – 20 N – 23	Y – 18 N – 23	Y – 22 N – 20	Y – 14 N – 26	Y – 16 N – 22	Y – 18 N – 22	Y – 7 N – 35
DP07: Potato spindle tuber viroid	Y – 14 N – 32	Y – 35 N – 12	Y – 24 N – 19	Y – 22 N – 23	Y – 17 N – 26	Y – 22 N – 21	Y – 14 N – 28	Y – 17 N – 22	Y – 17 N – 22	Y – 6 N – 37
DP08: <i>Ditylenchus</i>	Y – 15	Y – 37	Y – 28	Y – 24	Y – 20	Y – 25	Y – 19	Y – 19	Y – 17	Y – 8

<i>dipsaci</i> and <i>Ditylenchus</i> <i>destructor</i>	N – 31	N – 11	N – 17	N – 23	N – 25	N – 20	N – 25	N – 23	N – 24	N – 37
DP09: Genus <i>Anastrepha</i> Schiner	Y – 18 N – 28	Y – 30 N – 16	Y – 23 N – 18	Y – 20 N – 23	Y – 16 N – 25	Y – 21 N – 21	Y – 18 N – 24	Y – 17 N – 22	Y – 18 N – 20	Y – 9 N – 35
DP10: <i>Bursaphelen</i> <i>chus</i> <i>xylophilus</i>	Y – 10 N – 34	Y – 34 N – 10	Y – 24 N – 17	Y – 19 N – 25	Y – 17 N – 24	Y – 22 N – 21	Y – 18 N – 25	Y – 17 N – 24	Y – 16 N – 22	Y – 9 N – 33
DP11: <i>Xiphinema</i> <i>americanum</i> <i>sensu lato</i>	Y – 16 N – 29	Y – 30 N – 14	Y – 19 N – 24	Y – 15 N – 29	Y – 13 N – 27	Y – 18 N – 25	Y – 14 N – 28	Y – 16 N – 25	Y – 15 N – 24	Y – 7 N – 36
DP12: Phytoplasma s	Y – 14 N – 30	Y – 32 N – 12	Y – 22 N – 20	Y – 19 N – 23	Y – 15 N – 25	Y – 22 N – 21	Y – 16 N – 25	Y – 18 N – 21	Y – 19 N – 19	Y – 8 N – 33
ISPM 28: Phytosanitar y treatments for regulated pests	Y – 14 N – 34	Y – 41 N – 9	Y – 25 N – 20	Y – 22 N – 23	Y – 18 N – 27	Y – 23 N – 24	Y – 19 N – 25	Y – 27 N – 17	Y – 27 N – 17	Y – 8 N – 37
PT01: Irradiation treatment for <i>Anastrepha</i> <i>ludens</i>	Y – 24 N – 21	Y – 20 N – 20	Y – 10 N – 27	Y – 7 N – 29	Y – 6 N – 29	Y – 8 N – 31	Y – 7 N – 30	Y – 13 N – 25	Y – 11 N – 25	Y – 3 N – 36
PT02: Irradiation treatment for <i>Anastrepha</i> <i>obliqua</i>	Y – 24 N – 21	Y – 20 N – 20	Y – 10 N – 27	Y – 7 N – 29	Y – 6 N – 29	Y – 9 N – 30	Y – 8 N – 28	Y – 11 N – 25	Y – 10 N – 25	Y – 3 N – 35
PT03: Irradiation treatment for <i>Anastrepha</i> <i>serpentine</i>	Y – 24 N – 21	Y – 19 N – 21	Y – 10 N – 27	Y – 7 N – 29	Y – 6 N – 29	Y – 9 N – 30	Y – 7 N – 28	Y – 12 N – 25	Y – 10 N – 25	Y – 3 N – 35
PT04: Irradiation treatment for <i>Bactrocera</i> <i>jarvisi</i>	Y – 24 N – 21	Y – 22 N – 19	Y – 10 N – 27	Y – 8 N – 29	Y – 7 N – 29	Y – 7 N – 29	Y – 10 N – 31	Y – 8 N – 29	Y – 12 N – 25	Y – 4 N – 34

PT05: Irradiation treatment for <i>Bactrocera</i> <i>tryoni</i>	Y – 24 N – 22	Y – 23 N – 20	Y – 12 N – 28	Y – 9 N – 30	Y – 7 N – 30	Y – 11 N – 31	Y – 9 N – 29	Y – 14 N – 25	Y – 13 N – 26	Y – 5 N – 34
PT06: Irradiation treatment for <i>Cydia</i> <i>pomonella</i>	Y – 23 N – 22	Y – 22 N – 20	Y – 13 N – 26	Y – 9 N – 28	Y – 7 N – 28	Y – 11 N – 30	Y – 10 N – 28	Y – 13 N – 25	Y – 12 N – 26	Y – 4 N – 34
PT07: Irradiation treatment for fruit flies of the family Tephritidae (generic)	Y – 19 N – 28	Y – 29 N – 17	Y – 16 N – 27	Y – 14 N – 28	Y – 11 N – 30	Y – 13 N – 31	Y – 12 N – 29	Y – 15 N – 26	Y – 13 N – 28	Y – 5 N – 36
PT08: Irradiation treatment for <i>Rhagoletis</i> <i>pomonella</i>	Y – 23 N – 23	Y – 22 N – 20	Y – 11 N – 29	Y – 7 N – 31	Y – 5 N – 31	Y – 9 N – 31	Y – 7 N – 29	Y – 12 N – 25	Y – 12 N – 26	Y – 4 N – 34
PT09: Irradiation treatment for <i>Conotrachel</i> <i>us nenuphar</i>	Y – 22 N – 22	Y – 21 N – 20	Y – 11 N – 28	Y – 7 N – 30	Y – 5 N – 30	Y – 9 N – 31	Y – 7 N – 29	Y – 13 N – 25	Y – 11 N – 26	Y – 3 N – 35
PT10: Irradiation treatment for <i>Grapholita</i> <i>molesta</i>	Y – 22 N – 23	Y – 21 N – 20	Y – 12 N – 27	Y – 8 N – 29	Y – 6 N – 29	Y – 9 N – 31	Y – 8 N – 29	Y – 12 N – 25	Y – 11 N – 26	Y – 3 N – 35
PT11: Irradiation treatment for <i>Grapholita</i> <i>molesta</i> under hypoxia	Y – 23 N – 22	Y – 21 N – 20	Y – 11 N – 28	Y – 8 N – 29	Y – 6 N – 29	Y – 9 N – 30	Y – 8 N – 28	Y – 11 N – 25	Y – 10 N – 26	Y – 4 N – 33
PT12: Irradiation treatment for <i>Cyclas</i>	Y – 23 N – 22	Y – 21 N – 20	Y – 11 N – 28	Y – 8 N – 29	Y – 6 N – 29	Y – 8 N – 31	Y – 6 N – 29	Y – 11 N – 25	Y – 11 N – 26	Y – 3 N – 34

<i>formicarius elegantulus</i>										
PT13: Irradiation treatment for <i>Euscepes postfasciatus</i>	Y – 23 N – 22	Y – 21 N – 20	Y – 11 N – 27	Y – 9 N – 27	Y – 6 N – 28	Y – 8 N – 32	Y – 6 N – 29	Y – 10 N – 26	Y – 11 N – 26	Y – 3 N – 34
PT14: Irradiation treatment for <i>Ceratitis capitate</i>	Y – 20 N – 25	Y – 26 N – 18	Y – 13 N – 28	Y – 13 N – 27	Y – 9 N – 29	Y – 11 N – 31	Y – 9 N – 28	Y – 12 N – 26	Y – 12 N – 27	Y – 3 N – 35
PT15: Vapour heat treatment for <i>Bactrocera cucurbitae</i> on <i>Cucumis melo</i> var. <i>reticulatus</i>	Y – 21 N – 25	Y – 26 N – 15	Y – 14 N – 25	Y – 12 N – 26	Y – 9 N – 26	Y – 11 N – 28	Y – 8 N – 27	Y – 13 N – 24	Y – 12 N – 24	Y – 5 N – 32
PT16: Cold treatment for <i>Bactrocera tryoni</i> on <i>Citrus sinensis</i>	Y – 20 N – 28	Y – 31 N – 14	Y – 19 N – 22	Y – 17 N – 24	Y – 13 N – 25	Y – 14 N – 28	Y – 12 N – 27	Y – 18 N – 23	Y – 16 N – 24	Y – 5 N – 36
PT17: Cold treatment for <i>Bactrocera tryoni</i> on <i>Citrus reticulata</i> x <i>C. sinensis</i>	Y – 22 N – 26	Y – 28 N – 16	Y – 18 N – 23	Y – 16 N – 25	Y – 12 N – 26	Y – 14 N – 28	Y – 13 N – 27	Y – 16 N – 23	Y – 16 N – 23	Y – 5 N – 36
PT18: Cold treatment for <i>Bactrocera tryoni</i> on <i>Citrus limon</i>	Y – 20 N – 27	Y – 28 N – 16	Y – 17 N – 24	Y – 15 N – 26	Y – 11 N – 27	Y – 13 N – 29	Y – 12 N – 28	Y – 17 N – 23	Y – 16 N – 23	Y – 6 N – 35
PT19: Irradiation treatment for <i>Bactrocera melanotus</i>	Y – 23 N – 22	Y – 21 N – 20	Y – 11 N – 28	Y – 9 N – 28	Y – 6 N – 29	Y – 9 N – 31	Y – 8 N – 29	Y – 13 N – 24	Y – 12 N – 25	Y – 3 N – 35

and <i>Bactrocera xanthodes</i> on <i>Carica papaya</i>										
PT20: Irradiation treatment for <i>Ostrinia nubilalis</i>	Y – 22 N – 23	Y – 21 N – 20	Y – 12 N – 27	Y – 9 N – 28	Y – 6 N – 29	Y – 8 N – 32	Y – 6 N – 30	Y – 13 N – 25	Y – 11 N – 25	Y – 3 N – 36
PT21: Vapour heat treatment for <i>Bactrocera melanotus</i> and <i>Bactrocera xanthodes</i> on <i>Carica papaya</i>	Y – 22 N – 24	Y – 25 N – 16	Y – 15 N – 24	Y – 12 N – 25	Y – 9 N – 26	Y – 11 N – 28	Y – 8 N – 28	Y – 14 N – 24	Y – 13 N – 23	Y – 4 N – 35
ISPM 29: Recognition of pest free areas and areas of low pest prevalence	Y – 13 N – 34	Y – 39 N – 14	Y – 27 N – 24	Y – 27 N – 25	Y – 22 N – 28	Y – 25 N – 24	Y – 21 N – 25	Y – 25 N – 22	Y – 19 N – 26	Y – 7 N – 38
ISPM 30: Establishmen t of areas of low pest prevalence for fruit flies (Tephritidae)	Y – 20 N – 30	Y – 32 N – 17	Y – 21 N – 27	Y – 22 N – 23	Y – 14 N – 32	Y – 19 N – 26	Y – 16 N – 26	Y – 22 N – 22	Y – 16 N – 27	Y – 3 N – 41
ISPM 31: Methodologi es for sampling consignment s	Y – 7 N – 42	Y – 50 N – 7	Y – 28 N – 27	Y – 34 N – 21	Y – 28 N – 25	Y – 34 N – 18	Y – 29 N – 22	Y – 32 N – 17	Y – 29 N – 19	Y – 13 N – 35
ISPM 32: Categorizatio n of	Y – 6 N – 43	Y – 49 N – 11	Y – 40 N – 17	Y – 37 N – 18	Y – 34 N – 19	Y – 38 N – 15	Y – 36 N – 16	Y – 35 N – 16	Y – 30 N – 20	Y – 17 N – 34

commodities according to their pest risk										
ISPM 33: Pest free potato (<i>Solanum</i> spp.) micropropagative material and minitubers for international trade	Y – 16 N – 32	Y – 37 N – 15	Y – 20 N – 26	Y – 23 N – 24	Y – 18 N – 27	Y – 21 N – 26	Y – 21 N – 26	Y – 19 N – 25	Y – 16 N – 27	Y – 6 N – 38
ISPM 34: Design and operation of post-entry quarantine stations for plants	Y – 9 N – 41	Y – 40 N – 11	Y – 23 N – 27	Y – 22 N – 26	Y – 12 N – 36	Y – 24 N – 26	Y – 18 N – 29	Y – 23 N – 25	Y – 18 N – 30	Y – 7 N – 40
ISPM 35: Systems approaches for pest management of fruit flies (<i>Tephritidae</i>)	Y – 13 N – 36	Y – 40 N – 11	Y – 23 N – 27	Y – 22 N – 26	Y – 12 N – 36	Y – 24 N – 26	Y – 18 N – 29	Y – 23 N – 25	Y – 18 N – 30	Y – 7 N – 40
ISPM 36: Integrated measures for plants for planting	Y – 6 N – 39	Y – 46 N – 10	Y – 33 N – 20	Y – 32 N – 20	Y – 27 N – 26	Y – 36 N – 18	Y – 29 N – 22	Y – 33 N – 18	Y – 27 N – 21	Y – 12 N – 37
ISPM 37: Determination of host status of fruit to fruit flies (<i>Tephritidae</i>)	Y – 16 N – 33	Y – 38 N – 12	Y – 21 N – 26	Y – 24 N – 23	Y – 17 N – 30	Y – 24 N – 24	Y – 22 N – 24	Y – 23 N – 23	Y – 18 N – 27	Y – 9 N – 35

Table 19: Implementation prioritization for ISPMs 1-37 (exhaustive results)

ISPM	Response rate (Count and percent)
ISPM 11: <i>Pest risk analysis for quarantine pests</i> ISPM 6: <i>Guidelines for surveillance</i>	49 (65%)
ISPM 2: <i>Framework for pest risk analysis</i> ISPM 7: <i>Phytosanitary certification system</i> ISPM 23: <i>Guidelines for inspection</i>	46 (61%)
ISPM 15: <i>Regulation of wood packaging material in international trade</i> ISPM 12: <i>Phytosanitary certificates</i>	40 (53%)
ISPM 8: <i>Determination of pest status in an area</i> ISPM 20: <i>Guidelines for a phytosanitary import regulatory system</i>	39 (52%)
ISPM 17: <i>Pest reporting</i>	36 (48%)
ISPM 1: <i>Phytosanitary principles for the protection of plants and the application of phytosanitary measures in international trade</i> ISPM 4: <i>Requirements for the establishment of pest free areas</i>	33 (44%)
ISPM 9: <i>Guidelines for pest eradication programmes</i> ISPM 19: <i>Guidelines on lists of regulated pests</i> ISPM 21: <i>Pest risk analysis for regulated non quarantine pests</i>	31 (41%)
ISPM 13: <i>Guidelines for the notification of non-compliance and emergency action</i>	30 (40%)
ISPM 5: <i>Glossary of phytosanitary terms</i> ISPM 10: <i>Requirements for the establishment of pest free places of production and pest free production sites</i>	29 (39%)
ISPM 32: <i>Categorization of commodities according to their pest risk</i>	28 (37%)
ISPM 27: <i>Diagnostic protocols for regulated pests</i> ISPM 31: <i>Methodologies for sampling of consignments</i>	26 (35%)
ISPM 28: <i>Phytosanitary treatments for regulated pests</i>	25 (33%)
ISPM 14: <i>The use of integrated measures in a systems approach for pest risk management</i>	24 (32%)
ISPM 3: <i>Guidelines for the export, shipment, import and release of biological control agents and other beneficial organisms</i> ISPM 16: <i>Regulated non-quarantine pests: concept and application</i>	22 (29%)
ISPM 26: <i>Establishment of pest free areas for fruit flies (Tephritidae)</i> ISPM 34: <i>Design and operation of post-entry quarantine stations for plants</i>	21 (28%)
ISPM 22: <i>Requirements for the establishment of areas of low pest prevalence</i>	20 (27%)
ISPM 25: <i>Consignments in transit</i>	20 (27%)
ISPM 24: <i>Guidelines for the determination and recognition of equivalence of phytosanitary measures</i> ISPM 36: <i>Integrated measures for plants for planting</i>	18 (24%)
ISPM 35: <i>Systems approach for pest risk management of fruit flies (Tephritidae)</i>	17 (23%)
ISPM 18: <i>Guidelines for the use of irradiation as a phytosanitary measure</i>	14 (19%)
ISPM 27 - DP12: <i>Phytoplasmas</i> ISPM 29: <i>Recognition of pest free areas and areas of low pest prevalence</i>	13 (17%)
ISPM 27 - DP11: <i>Xiphinema americanum sensu lato</i>	12 (16%)
ISPM 28 - PT01: <i>Irradiation treatment for Anastrepha ludens</i> ISPM 37: <i>Determination of host status of fruit to fruit flies (Tephritidae)</i> ISPM 30: <i>Establishment of areas of low pest prevalence for fruit flies (Tephritidae)</i>	11 (15%)
ISPM 28 - PT05: <i>Irradiation treatment for Bactrocera tryoni</i> ISPM 33: <i>Pest free potato (Solanum spp.) micropropagative material and minitubers for international trade</i>	10 (13%)
ISPM 27 - DP08: <i>Ditylenchus dipsaci and Ditylenchus destructor</i>	9 (12%)
ISPM 27 - DP10: <i>Bursaphelenchus xylophilus</i> ISPM 28 - PT04: <i>Irradiation treatment for Bactrocera jarvisi</i>	7 (9%)
ISPM 27 - DP09: <i>Genus Anastrapha Schiner</i> ISPM 28 - PT07: <i>Irradiation treatment for fruit flies of the family Tephritidae (generic)</i>	6 (8%)
ISPM 27 - DP07: <i>Potato spindle tuber viroid</i>	5 (7%)
ISPM 27 - DP01: <i>Thrips palmi</i> Karney ISPM 27 - DP03: <i>Trogoderma granarium</i> Everts ISPM 27 - DP04: <i>Tilletia indica</i> Mitra	3 (4%)
ISPM 27 - DP02: <i>Plum pox virus</i> ISPM 27 - DP05: <i>Phyllosticta citricarpa (McAlpine) Aa</i> on fruit	2 (3%)
	1 (1%)

ISPM 27 - DP06: <i>Xanthomonas citri</i> subsp. <i>citri</i> ISPM 28 - PT13: Irradiation treatment for <i>Euscepes postfasciatus</i> ISPM 28 - PT14: Irradiation treatment for <i>Ceratitidis capitata</i> ISPM 28 - PT16: Cold treatment for <i>Bactrocera tryoni</i> on <i>Citrus sinensis</i> ISPM 28 - PT21: Vapour heat treatment for <i>Bactrocera melanotus</i> and <i>Bactrocera xanthodes</i> on <i>Carica papaya</i>	
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Table 20: Implementation ratings for CPM recommendations (exhaustive results)

CPM recommendation	Very high	High	Moderate	Low	None
ICPM-2/1999 Recommendation concerning Information Exchange	14	20	35	5	3
ICPM-3/2001 Recommendations concerning LMOs, Biosecurity and Alien Invasive Species	9	17	23	16	11
ICPM-1/2005 Threats to Biodiversity posed by Alien Invasive Species: Actions within the Framework of the IPPC	10	16	30	16	5
CPM-1/2006 The Role of IPPC Contact Points	31	29	12	2	2
CPM-3/2008 Replacement or reduction of the use of methyl bromide as a phytosanitary measure	23	21	19	9	4
CPM-9/2014/1 IPPC Coverage of Aquatic Plants	7	13	19	19	17
CPM-9/2014/2 Internet Trade (E-Commerce) in Plants and other Regulated Articles	8	18	18	19	12
CPM-10/2015 Recommendation on Sea Containers	8	20	17	19	9
CPM-11/2016 Recommendation on the Importance of Pest Diagnostics	23	21	20	6	5