

REPORT

Rome,
Italy,
15-19 May
2000

**Interim Standards
Committee
First meeting**

Meeting Report
AGP/2000

**REPORT OF THE FIRST MEETING OF THE
INTERIM STANDARDS COMMITTEE**

Rome, Italy: 15-19 May 2000



FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

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1. OPENING OF MEETING

Ms Fresco, Assistant Director-General, FAO Agriculture Department, opened the First Meeting of the Interim Standards Committee (ISC). Ms Fresco noted the new title for the Committee and welcomed new members from Canada, Australia, and Hungary. Ms Idinger was introduced as the new Information Officer with the Secretariat. Ms Fresco described the ISC as a key part of international standard-setting and emphasized the normative role which the ISC fulfils in FAO. Ms Fresco noted that other standard setting bodies, including Codex, are funded in part through regular programme funds as well as through donations from countries. She was pleased to note that some governments had provided funding for their experts attending the meeting to make additional resources available for standard-setting. Ms Fresco noted that the work of the ISC has been given a high degree of prominence in FAO's Medium Term Plans.

Mr Van der Graaff, Chief, FAO Plant Production and Protection Service, discussed the recent Working Group on the Establishment of the Standards Committee. He joined Ms Fresco in expressing gratitude to members of the Committee, whose governments had funded their participation, indicating the priority which Member countries ascribe to the ISC and its work programme. He also noted that while the general framework remains the same, there are now different procedures which are used in drafting and adopting standards. He requested that the ISC consider environmental impacts when they discuss standards. He indicated in particular that economic impacts need to accommodate environmental impacts as well.

Mr Griffin, Coordinator for the IPPC Secretariat, introduced the work programme for the Interim Standards Committee. He noted that work of the Committee would be primarily devoted to the review of documents to be sent to governments for consultation. This was because the Secretariat had decided not to include discussion of the comments received from governments on the draft standards *PRA for quarantine pests*, and *Guidelines for phytosanitary certificates*.

Numerous governments had contacted the Secretariat indicating that they required additional time to fully consider the documents. In addition, it was noted that funding had been made available for Asian and Pacific countries to participate in a regional consultation on these standards scheduled to occur August 2000 in Bangkok. The Secretariat extended the comment period for these two standards to August 31 to accommodate these developments.

Mr Griffin explained that the Secretariat has scheduled a second meeting of the Interim Standards Committee to occur 27 November to 1 December 2000. The additional meeting is to begin the process of two meetings per year as agreed by the Interim Commission on Phytosanitary Measures (ICPM), and would provide the opportunity to consider comments from governments on standards sent for consultation, including documents from the present meeting. The meeting in November would determine which standards were submitted to the ICPM for adoption at its next session in April 2001.

An agenda for the present meeting was adopted based on the programme proposed by the Secretariat (Annex I). Mr Vereecke was invited and agreed to continue as Chairperson.

2. ADOPTION OF REPORTS

The report of the sixth CEPM (May 1999 - Rome) and its supplementary meeting (September 1999 - Braunschweig, Germany) were introduced briefly by Mr Griffin and adopted by the Committee (Annex II). The exceptional and ad hoc nature of the supplementary meeting was noted, recognizing that it was composed of a subgroup of the CEPM rather than the full membership and that the meeting replaced a working group which was rescheduled for later in the year.

The Committee noted the recommendation in the report for the Secretariat to prepare explanatory documents for the standards sent to governments, in particular the draft standard *PRA for quarantine pests*. Mr Griffin confirmed the recommendation and acknowledged that explanatory documents have been frequently suggested but not consistently supported, as in the case of the suggestion for an annotated Glossary. He recalled that although the supplementary meeting strongly supported the formulation of such a document for the PRA standard, there was not sufficient time to prepare such a document following the meeting and funds were not projected for translation to make this possible.

Mr Griffin further explained that the preparation of such documents by the Secretariat was often inappropriate as it involved interpretations of the Convention and ISPMs. This led to a discussion of the concept of stewardship, which had also been proposed by the Informal Working Group on the Establishment of the Standards Committee and was included as an element in the specifications for standards proposed by the Secretariat. It was agreed that the future preparation of discussion papers and explanatory documents would be an appropriate responsibility for stewards.

3. AMENDMENTS TO THE GLOSSARY OF PHYTOSANITARY TERMS

The Committee considered the report and recommendations of the Glossary Working Group (March 2000 - Paris, France). Discussions began by identifying relationships between the proposed term/definition of *bark free wood* and the existing definition of *debarked*. The Committee noted that an upcoming working group on non-manufactured wood packaging was likely to discuss relevant definitions in greater detail. It was suggested that a "mini-standard" or explanatory document supplementing the definitions may be needed and could be suggested to the working group. The Committee decided to defer changes in wood-related terms/definitions pending further consideration and recommendations of the working group.

Commodity and *consignment* were amended to remove "regulated" as it was decided that the terms should not be limited to regulated articles. Consignment was further modified to indicate that it was not limited only to shipments covered by a phytosanitary certificate.

The Committee noted that a number of definitions had been amended to include *commodity class*. It was explained that this was part of the original intent for including these terms in the Glossary but that it had not been made explicit previously. Recent working groups emphasized the importance of retaining the concept of commodity class. The Glossary Working Group recommended that the concept be made more explicit in the Glossary. The Committee accepted these changes with minor modifications. Affected terms include *bulbs and tubers, cut flowers and branches, fruits and vegetables, grain, plants in tissue culture, seeds, and wood*.

A definition for planting material other than what is covered by *bulbs and tubers, plants in tissue culture, and seeds* was proposed by the Glossary Working Group but a term was not agreed upon. The Committee debated this issue and decided that a term and definition was not essential and would not be proposed at this time.

Modifications to the definitions of *phytosanitary procedure* and *phytosanitary regulation* were accepted with the change of *survey* to *surveillance* to convey that monitoring is included. Discussion of these terms resulted in agreement that *phytosanitary procedures* include PRA. Following this, the Committee accepted the modification proposed for the definition of *regulated area* to substitute *phytosanitary regulations* or *[phytosanitary] procedures* for *phytosanitary measures*. This was done in recognition of the limitations within the definition for *phytosanitary measures* for application to *regulated non-quarantine pests*. The Committee further suggested that the Glossary Group undertake to develop a definition that may be proposed for replacement of the existing definition for *phytosanitary measure* when it becomes feasible to make such a change. The Committee suggested that the same be done for *quarantine pest*.

Growing period (for a crop) was accepted as a replacement for *growing season* which was deleted. This was in recognition of situations where crops may grow and produce continuously (e.g. tropics, and glasshouses).

The Committee agreed to add other new terms/definitions including *devitalization; emergency action; emergency measure; official control; phytosanitary action; and provisional measure*. The Committee commented on the need to clearly understand the relationship of emergency and provisional actions or measures, and phytosanitary actions or measures. It was suggested that an explanatory document might be useful for this purpose.

The Committee agreed to remove *country of re-export* based on the suggestion of the Glossary Working Group that the definition was confusing and that *re-exported consignment* was more accurate. Modifications to the definition of the term *outbreak* were proposed but not accepted by the Committee. Confusion on this point arise from the different use of the term for quarantine pests where outbreak refers to a new population and common usage may refer to the explosive increase of an existing population. The Committee agreed to maintain the existing term/definition.

The Committee approved amendments to the Glossary for circulation to governments for consultation (Annex III).

4. SPECIFICATIONS FOR STANDARDS

Mr Griffin introduced a draft format for specifications including several examples done by the Secretariat for demonstration purposes. He explained that the transition to the new standard setting procedures would require that the Standards Committee approve specifications for new standards as part of its responsibilities. The purpose of the document provided to the present meeting was to gain agreement on the format and content of specifications.

It was noted that the draft outline included provision for the identification of a steward. Discussion on this point was helpful to clarify the role of a steward and agree that in many cases the Secretariat would assume this role. The Committee agreed that stewards should work closely with the Secretariat.

The draft format for specifications was generally supported with suggestions for minor modifications. The Committee adopted the modified format for use by the Secretariat (Annex IV). It was suggested that the Secretariat undertake to draft specifications for review at the next meeting.

5. GUIDELINES ON THE INTERPRETATION AND APPLICATION OF THE CONCEPT OF OFFICIAL CONTROL FOR REGULATED PESTS

The topic was introduced by Mr Griffin with a brief history of the issue emphasizing in particular the expectation of the SPS Committee. The meeting was provided with the report of the Open-ended Working Group on Official Control held 22-24 March in Bordeaux, France. The Secretariat also supplied a draft document which incorporated the results of the Bordeaux meeting in a format designed to supplement the Glossary.

Questions were raised immediately about the format and intent of such a document. One suggestion was to revise the format to be consistent with ISPMs. Others suggested that the format of a “mini-standard” would be useful for many purposes where an explanatory document was needed, in particular related to definitions. The Coordinator suggested that the document be put forward as a supplement to the Glossary, anticipating that other such documents would be formulated in the future. The Committee agreed that such a format was useful and should be explored, recognizing that the document would be subject to the agreed standard setting procedures, including consultation by governments.

Modifications for clarity were made to the proposed definition as were several other changes in the text. It was noted that discussion documents used in Bordeaux were very useful and informative. It was suggested to add a *Reference* section to identify these documents. The Committee agreed instead that the report of the Bordeaux meeting should be listed as a reference because the discussion documents were not intended by the authors to be permanent references.

The modified document was approved by the Committee for circulation to governments for consultation (Annex V).

6. GUIDELINES FOR THE NOTIFICATION OF NON-COMPLIANCE

The draft standard titled *Guidelines for the notification of interceptions and non-compliance* was introduced by Mr Griffin with a brief account of its history and of the discussions of the expert working group leading to its formulation. It was noted that the standard is based on specific obligations from the New Revised Text of the IPPC.

Concerns were raised about the use of *contracting parties* in the draft standard where *countries* had been used in previous standards. Questions were raised about the implications of this terminology and how a standard of this nature applies to non-contracting parties. The view was expressed that *countries*, *Members*, or *governments* may be more appropriate

terminology, or some combination of these may be needed depending on the context. The issue was identified as having legal implications and was therefore referred to the Secretariat for clarification with the FAO Legal Office.

The Committee considered the relationship of interceptions to non-compliance and decided that the title should be amended to refer only to non-compliance as interceptions were considered to be one aspect of non-compliance.

Definitions were reviewed and adjusted based on previous Glossary discussions and the occurrence of terms in the text of the standard. The outline of requirements was redrafted to include more narrative and to be more descriptive. The section originally titled *IPPC obligations* was modified to become *Basis for notification systems* and it was agreed that IPPC obligations would be summarized rather than quoted.

Concern was expressed about the interception of a pest being confused as the basis for notification when it was actually the detection of a pest that resulted in phytosanitary action which was important. The text was amended to make this clear.

All text relating to the concept of warning notifications was deleted as it was believed to be implicit that such notifications may be provided on a bilateral basis. In addition, it was noted that warning notifications are not an explicit obligation and concern was expressed about the possibility that warning notifications could create legal or other problems where used indiscriminately.

Amendments were made to the document as agreed and the modified draft was approved by the Committee for circulation to governments for consultation (Annex VI).

7. GUIDELINES FOR THE PREPARATION OF REGULATED PEST LISTS

Mr Griffin explained the background and history of the draft standard, noting that the expert working group had substantial discussions highlighting a diversity of interpretations and variations in systems for the implementation of pest listing obligations. The expert working group identified an explicit obligation arising from Article VII.2I and an implicit obligation arising from the certification statement on the phytosanitary certificates annexed to the Convention. In addition, it observed the need to introduce and explain emergency actions and provisional measures. The Coordinator asked the Committee to consider the appropriateness of these additions and the possibility of agreeing on definitions for these terms.

As with the draft standard *Guidelines for notification of non-compliance*, the Committee noted that the draft is based on IPPC obligations and refers to contracting parties. Legal clarification was again requested for the proper use of terms and to understand the application of the standard to non-contracting parties.

Concern was expressed that the terms *specified regulated pests* and *general regulated pests* could refer to completely different pest lists when it was intended that lists of specified pests be extracted from the general list of regulated pests. It was agreed to revise the titles to *general list of regulated pests* and *specific list of regulated pests*. Further clarity was provided by adding reference in the text to a specified list of regulated pests as a subset of a general list of regulated pests.

The Committee considered the placement and content of text regarding emergency actions and provisional measures. It was agreed that both concepts were relevant and important to understand. The following text was drafted to clarify the relationship of these terms:

Emergency action may be taken for any pest (whether specified or not) which represents an abnormal and or unexpected phytosanitary situation. Such action may be associated with or followed by the establishment of emergency measures. If insufficient information is available concerning such a pest to justify emergency measures, they may be declared provisional measures.

This was believed to be a useful explanation but was not included in the document as it was decided that the adoption of appropriate definitions in the glossary was needed instead. The Committee suggested again that a “mini-standard” may be usefully considered to provide a clear explanation of the relevant terms and their relationships. The sections describing phytosanitary actions were modified accordingly.

Discussion on the use of scientific and common names resulted in amendment to the text to reflect the need for the common names of taxonomic groups to complement scientific names rather than identify particular groups requiring more specific information.

The list of terms and definitions was revised to reflect the amended text and the Outline of requirements was modified to be more descriptive.

The amended document was approved by the Committee for circulation to governments for consultation (Annex VII).

8. GUIDELINES FOR AN IMPORT REGULATORY SYSTEM

The Coordinator observed that drafts of the standard *Guidelines for an import regulatory system* had been reviewed by the 4th and the 5th CEPM. Amendments to the standard had been made by the Secretariat based on proposals of the original expert working group and comments from the CEPM. In addition, the standard was distributed to several other experts for further review and suggestions. One of these experts, Mr Pemberton (United Kingdom), had provided detailed proposals for revision of the standard. Mr Griffin explained that these comments were not considered in the draft provided to the meeting by the Secretariat because they were received after documents for the meeting had been finalized.

The Committee agreed that Mr Pemberton’s proposals were very useful. It was agreed to briefly review both documents, but to concentrate on the draft provided by the Secretariat. Mr Small (Barbados) volunteered to serve as ‘steward’ for the further development of the standard.

There was general agreement that the standard was too lengthy and contained detail that was important but not essential. Some Members suggested dividing the standard into two parts -- one section dealing with essential guidance and another section containing supporting information. The Committee agreed on this approach, noting that Mr Pemberton’s suggestions also followed this format. The Committee proceeded to review the Secretariat’s document,

noting sections of the draft which could be placed in one or the other section of a revised document. General comments on the text, concepts, and format were collected in the process.

Mr Smith (EPPPO) provided an introduction to the document submitted by Mr Pemberton. He noted that restructuring of the standard was the main concern. The Committee expressed its appreciation for the effort and encouraged Mr Small to give consideration to the draft as well as comments from other experts in his redrafting of the standard. Mr Small stated that he anticipated providing the Committee with a revised draft at its next meeting.

9. OTHER BUSINESS

The Chairman noted that a substantial agenda was anticipated for the next meeting of the Committee. He requested that the Secretariat provide documents for the meeting as far in advance as possible and suggested that the summaries of comments from governments be organized according to corresponding sections in the text of the standards. The Coordinator agreed to provide comments as requested and noted that comments *on PRA for quarantine pests* and *Guidelines for phytosanitary certificates* could be provided as early as September, but that comments on documents resulting from the present meeting could not be available until the end of October.

Mr Nowell, Plant pathologist with the IPPC Secretariat, reported on a recent OECD meeting regarding the development of guidelines for ISPM No. 3, the *Code of Conduct for the Import and Release of Exotic Biological Control Agents*. It was noted that OECD was encouraging the rapid development of guidelines for adoption by European countries.

10. CLOSE OF MEETING

The Chair thanked the experts for their cooperation and hard work. He noted again the scheduling of the next meeting planned for 27 November to 1 December. The meeting was then adjourned.

Interim Standards Committee

FIRST SESSION
Rome: 15-19 May, 2000

AGENDA

1. Opening of the Session
2. Adoption of Reports
3. Amendments to the Glossary of Phytosanitary Terms
4. Specifications for Standards
5. Guidelines on the Interpretation and Application of the Concept of Official Control for Regulated Pests
6. Guidelines for the Notification of Non-compliance
7. Guidelines for the Preparation of Regulated Pest Lists
8. Guidelines for an Import Regulatory System
9. Other Business
10. Close of Meeting

**Report of the Sixth Committee of Experts on Phytosanitary Measures
Supplementary Meeting for the Draft ISPM on Pest Risk Analysis for Quarantine Pests**

8-10 September 1999 -- BBA, Braunschweig, Germany

The regular meeting of the 6th Committee of Experts on Phytosanitary Measures (CEPM) recommended a supplementary meeting in recognition of the urgent need to complete the draft standard on *Pest Risk Analysis for Quarantine Pests*. This draft standard had been included in the work programme for the regular sessions of both the 5th and 6th CEPM. Due to the heavy workload of the Committee and the complexity of the standard, neither occasion provided the opportunity for the experts to fully consider and comment on the draft standard, although some work had been done and numerous comments had been collected.

The 6th CEPM recommended that the IPPC Working Group originally set for drafting a standard on *Notification of interceptions and non-compliance* be postponed and the Secretariat use the occasion and venue for the supplementary session. The 6th CEPM agreed that a small group of volunteers would be charged with completing work on the standard. EPPO organized the meeting and provided funding for travel and subsistence of participants using funds provided by the IPPC Secretariat for the Working Group meeting.

CEPM Members attending were: Mr Hedley; Mr Smith; Mr Ikin; and Mr McDonell. Mr Griffin attended on behalf of the IPPC Secretariat. Mr Jens Unger of the Federal Biological Research Centre for Agriculture and Forestry, Federal Republic of Germany, also attended as an observer and provided logistical support.

The group was provided with a draft document that had been agreed by the 6th CEPM to be the basis for discussion. This document was a combination of the draft text that both the 5th and 6th CEPM had been considering with the addition of comments and suggested text resulting from an Open-ended Working Group on PRA Standards that was held in Bangkok immediately prior to the 6th CEPM. All CEPM Members attending the meeting were familiar with developments in the draft document over the past two years and were aware of the outcome of the meeting in Bangkok. Mr Hedley, Mr Ikin, and Mr Griffin were also participants in the Open-ended Working Group in Bangkok. Therefore, the group had significant background for purposes of reviewing and finalizing the draft.

It was noted at the outset that the most significant concerns were related to the Initiation section. Variations on modifications to this section were discussed and a final form was agreed. Although there was wide agreement on most remaining text, there were also numerous suggestions for moving pieces of text to make the draft more logical and easier to understand. EPPO had provided Mr Smith with detailed suggestions for reorganizing the document which became the basis for further discussion by the meeting.

The terms and definitions for *pest categorization*, *pest risk assessment*, and *pest risk management* were agreed and added. The Outline of Requirements was modified to reflect the revision. The section on economic impacts was abbreviated to de-emphasize the analytical techniques that had been a source of concern for many reviewers both within the CEPM and

outside the Committee, but environmental impacts were given additional emphasis. Significant detail was agreed for the section on risk management and sections were added to highlight pest listing, notification, monitoring, and documentation.

The meeting suggested that the Secretariat share the completed draft with CEPM Members that had not attended the meeting to ensure that they were informed of the outcome and to allow for their possible inputs before finalizing the document for distribution. It was also suggested that the Secretariat summarize points that had been agreed as additions to a revision of ISPM No. 2. It was noted that the size and complexity of the standard may make it difficult for governments to fully understand. It was suggested that the Secretariat provide an explanatory document with the standard when it was sent for government consultation and/or organize open-ended discussion groups to help governments with their understanding of the draft and assist with its evaluation for comments.

Attached is the resulting draft agreed by the meeting and approved on behalf of the 6th CEPM for distribution to governments by the IPPC Secretariat. Next steps require final editing by the Secretariat and translation into Spanish and French. It is anticipated that the draft will be distributed to governments in late November or early December. A comment period of 120 days will allow for comments to be received before the next meeting of the CEPM in May 2000. This creates the opportunity for the standard to be ready for adoption by the ICPM in 2000.

The IPPC Secretariat gratefully acknowledges assistance by EPPO and BBA whose flexibility made it possible to change the topic of the meeting to accommodate the urgent request by the 6th CEPM to complete the draft standard. In particular, Mr Unger was extremely effective in providing local arrangements and support and Mr Smith was well prepared to assist the discussions with proposals and alternatives. Facilities provided by BBA were excellent and arrangements made by Mr Unger worked flawlessly for all participants. Special thanks are due the dedicated Members of the CEPM who volunteered to return for this supplementary meeting.

INTERNATIONAL STANDARDS FOR PHYTOSANITARY MEASURES

PEST RISK ANALYSIS FOR QUARANTINE PESTS

Draft approved by the Supplementary Session of the Sixth CEP
10 September 1999 -- Braunschweig, Germany

INTRODUCTION

SCOPE

The standard provides details for the conduct of pest risk analysis (PRA) for quarantine pests. It describes processes to be used for risk assessment as well as the selection of risk management options.

REFERENCES

- Agreement on the Application of Sanitary and Phytosanitary Measures*, 1994. World Trade Organization, Geneva.
- Glossary of phytosanitary terms*, 1997. ISPM Pub. No. 5, FAO, Rome.
- Guidelines for pest risk analysis*, 1996. ISPM Pub. No. 2, FAO, Rome.
- Guidelines for surveillance*, 1998. ISPM Pub. No. 6, FAO, Rome.
- International Plant Protection Convention*, 1992. FAO, Rome.
- New Revised Text of the International Plant Protection Convention*, 1997. FAO, Rome.
- Principles of plant quarantine as related to international trade*, 1995. ISPM Pub. No. 1, FAO, Rome.
- Requirements for the establishment of pest free areas*, 1996. ISPM Pub. No. 4, FAO, Rome.
- Determination of pest status in an area*, 1998. ISPM No. 8, FAO, Rome.

DEFINITIONS AND ABBREVIATIONS

(Terms and definitions in bold are proposed for the Glossary of Phytosanitary Terms)

Area
Consignment
Country of origin
Country of re-export
Country of transit
Endangered area
Entry (of a pest)
Establishment
Introduction
IPPC
National Plant Protection Organization (NPPO)
Official

Pathway
Pest

Pest categorization The process for determining whether a pest has the characteristics of a quarantine pest or a regulated non-quarantine pest.

Pest risk assessment Evaluation of the probability of the introduction and spread of a pest and of the associated potential economic consequences.

Pest risk management Evaluation and selection of management options to reduce the risk of introduction and spread of a pest.

Pest risk analysis (PRA)
Phytosanitary certificate
Phytosanitary measure
Phytosanitary regulation
Post-entry quarantine
PRA area
Prohibition
Quarantine pest
Regional Plant Protection Organization (RPPO)
Spread

OUTLINE OF REQUIREMENTS

Pest risk analysis (PRA) for quarantine pests follows a process defined by three stages:

Stage 1 (initiating the process) involves identifying the pest(s) and pathways which are of concern and should be considered for risk analysis, in relation to the identified PRA area.

Stage 2 (risk assessment) begins with the categorization of individual pests to determine whether the criteria for a quarantine pest are satisfied. Risk assessment continues with an evaluation of the probability of pest entry, establishment, and spread, and of their potential economic consequences.

Stage 3 (risk management) involves identifying management options for reducing the risks identified at stage 2. These are evaluated for efficacy, feasibility, and impact in order to select those that are appropriate.

1. STAGE 1: INITIATION

The aim of the initiation stage is to identify the objectives of the PRA. The initiation stage includes identifying initiation point and the PRA area.

Initiation points for the PRA process include:

- the identification of a pathway that presents a potential pest hazard
- the identification of a pest that may require regulation
- the review or revision of phytosanitary policies and priorities.

1.1.1 PRA initiated by a pathway

The need for a new or revised PRA originating from a specific pathway will most frequently arise in the following situations:

- international trade is initiated in a new commodity (usually a plant or plant product) or a commodity from a new origin.
- new plant species are imported for selection and scientific research purposes
- a pathway other than commodity import is identified (natural spread, mail, garbage, passenger baggage etc.).

A list of pests may be generated by any combination of official sources, databases, scientific and other literature, or expert consultation. Once the list of pests which are likely to follow the pathway (e.g. be carried by the commodity) has been established, it is preferable to prioritize the listing by using expert judgement before proceeding to Stage 2 in the PRA process. If no potential quarantine pests are identified as likely to follow the pathway, the PRA may stop at this point.

1.1.2 PRA Initiated by a pest

A requirement for a new or revised PRA originating from a specific pest will most frequently arise in the following situations:

- an emergency arises on discovery of an established infestation or an outbreak of a new pest within a PRA area
- an emergency arises on interception of a new pest on an imported commodity
- a new pest risk is identified by scientific research
- a pest is introduced into an area
- a pest is reported to be more damaging in an area other than in its area of origin
- a particular pest is repeatedly intercepted
- a request is made to import an organism
- an organism is identified as a vector for other pests
- an organism is genetically altered in an way that may change its potential as a plant pest.

1.1.3 PRA initiated by a policy

A requirement for a new or revised PRA originating from policy concerns will most frequently arise in the following situations:

- a national policy decision is taken to review phytosanitary regulations, requirements or operations
- a proposal made by another country or by an international organization (RPPO, FAO) is reviewed
- a new treatment system, process, or new information impacts on an earlier decision
- a dispute arises on phytosanitary measures.

1.2 Identification of PRA Area

The PRA area should be defined as precisely as possible in order to identify the area for which information is needed.

1.3 Information

Information gathering is an essential element of all stages of PRA. It is important at the initiation stage in order to clarify the identity of the pest(s), its/their present distribution and association with host plants, commodities, etc. Other information will be gathered as required to reach necessary decisions as the PRA continues.

Information for PRA may come from a variety of sources. The provision of official information regarding pest status is an obligation under the IPPC (Art. VIII.1c) facilitated by official contact points (Art. VIII.2).

A check should also be made as to whether pathways, pests or policies have already been subjected to the PRA process, either nationally or internationally. If a PRA exists, its validity should be checked as circumstances and information may have changed. The possibility of using a PRA from a similar pathway or pest, that may partly or entirely replace the need for a new PRA, should also be investigated.

1.4 Conclusion for Initiation

At the end of Stage 1, the objectives, initiation point and PRA area have been identified. Relevant information has been collected and pests have been identified as possible candidates for regulation, either individually or in association with a pathway.

2. STAGE 2: PEST RISK ASSESSMENT

Risk assessment for quarantine pests first requires the categorization of pests identified in the initiation stage to determine which pests conform to the definition of a quarantine pest. The process proceeds by then estimating the potential for introduction and/or spread and the magnitude of the consequences for the pests of concern. The process of pest risk assessment can be divided into a number of separate steps:

- Pest categorization
- Assessment of introduction potential (entry, establishment, and spread)
- Assessment of potential economic consequences (including environmental impact).

In most cases, these steps will be applied sequentially in a PRA but it is not essential to follow a particular sequence. This standard allows a specific PRA to be judged against the principles of necessity, minimal impact, transparency, equivalence, risk analysis, managed risk and non-discrimination set out in ISPM No. 1, *Principles of plant quarantine as related to international trade* (FAO, 1993).

2.1 Pest Categorization

An essential part of the PRA process is the categorization of pests into quarantine or non-quarantine pests. At the outset, it may not be clear which pest(s) believed to present a hazard can be considered to require PRA. Stage 1 has identified a pest, or list of pests which may be considered hazards and potential candidates for PRA. Stage 2 considers these pests individually.

The categorization process examines for each pest whether the criteria for a quarantine pest are satisfied to determine if it fulfils the essential requirements of the definition:

quarantine pest - a pest of potential economic importance to the area endangered thereby and not yet present there, or present but not widely distributed and being officially controlled.

In this context, "area" should be understood to mean "an officially defined country, part of a country, or all or part of several countries". An "endangered area" should be understood to mean "an area where ecological factors favour the establishment of a pest whose presence in the area will result in economically important loss".

In the evaluation of a pathway associated with a commodity, a number of individual PRAs may be necessary for the various pests potentially associated with the pathway. Where this is the case, the facility to eliminate organisms from consideration before in-depth examination is undertaken is a valuable characteristic of the categorization process.

The information used for pest categorization need not be based on comprehensive studies.

2.1.1 Elements of categorization

Pest categorization includes the following primary elements:

- identity of the pest
- presence or absence in the PRA area
- regulatory status
- potential for introduction and spread in PRA area
- potential for economic consequences in the PRA area

2.1.1.1 Identity of Pest

The identity of the pest should be clearly defined to ensure that the assessment is being performed on an identifiable organism, and that biological and other information used in the assessment is relevant to the organism in question. To the extent possible, the pest should be identified as a distinct taxonomic entity. If this is not possible because the causal agent of particular symptoms has not yet been fully identified, then it should have been shown to produce consistent symptoms and to be transmissible.

The taxonomic unit for the pest is generally a species. The use of a higher or lower taxonomic level should be supported by scientifically sound rationale and, in the case of levels below the species, by evidence demonstrating that factors such as differences in virulence or susceptibility are significant enough to affect quarantine status.

In cases where a vector is involved, the vector may also be considered a pest to the extent that it is associated with the causal organism and is required for transmission of the pest.

2.1.1.2 Presence or absence in the PRA area

The pest should be absent from all or part of the PRA area.

2.1.1.3 Regulatory status

If the pest is present but not widely distributed in the PRA area, it should be under official control or considered for official control.

2.1.1.4 Potential for establishment and spread in PRA area

Evidence should be available to support the conclusion that the pest could become established or spread in the PRA area. Host species (or near relatives) should be present in the PRA area and the PRA area should have ecological/climatic conditions suitable for the establishment and spread of the pest.

2.1.1.5 Potential for economic consequences in PRA area

There should be clear indications that the pest is likely to have an unacceptable economic impact in the PRA area.

2.1.2 Conclusion of Pest Categorization

If it has been determined that the pest has the characteristics of a quarantine pest, the PRA process should continue. If a pest does not fulfil all of the criteria for a quarantine pest, the PRA process may stop unless further analysis is desired for other purposes. In the absence of sufficient information, the PRA process should continue.

2.2 Probability of Introduction and Spread

Pest introduction is comprised of both entry and establishment. Assessing the probability of introduction requires an analysis of each of the pathways a pest might follow from its origin to its establishment in the PRA area. In a PRA initiated by a specific pathway (usually an imported commodity), the probability of pest entry is evaluated for the pathway in question. The probabilities for pest entry associated with other pathways need to be given consideration as well.

For risk assessments that have been initiated for a specific pest, with no particular commodity or pathway under consideration, the potential of all probable pathways should be considered.

The assessment of probability of spread is based primarily on biological considerations similar to those for entry and establishment.

2.2.1 Probability of entry

The probability of entry depends on the pathways from the exporting country to the destination, and the frequency and quantity of pests associated with them. Documented pathways for the pest to enter new areas should be noted. Potential pathways which may not currently exist should be assessed.

2.2.1.1 Identification of pathways (for a PRA initiated by a pest)

All relevant pathways should be considered. They can be identified principally in relation to the geographical distribution and host range of the pest. Consignments of plants and plant products moving in international trade are the principal pathways of concern and existing patterns of such trade will, to a substantial extent, determine which pathways are relevant. Other pathways such as persons, baggage, mail and the exchange of scientific material should be considered where appropriate. Entry by natural means should also be assessed as a pathway to determine the feasibility of phytosanitary measures.

2.2.1.2 Probability of the pest being associated with the pathway at origin

The probability of the pest being associated, spatially or temporally, with the pathway at origin should be estimated. Factors of relevance include:

- prevalence of the pest in the source area
- occurrence of the pest in a life-stage that would be associated with commodities, containers, or conveyances
- volume and frequency of movement along the pathway
- seasonal timing
- pest management, cultural and commercial procedures applied at the place of origin (application of plant protection products, handling, culling, and grading).

It should be noted that the higher the number of pathways, the greater the risk of pests being associated with them.

2.2.1.3 Probability of survival during transport or transit

Characteristics of this element include:

- speed and conditions of transport and duration of the life cycle of the pest in relation to time in transport
- vulnerability of the life-stages likely to be transported
- prevalence of pest likely to be associated with a consignment
- commercial procedures (e.g. refrigeration) applied to consignments in the country of origin, country of destination, or in transit.

Pest interception data may be helpful for estimating the ability of a pest to survive in transport or transit.

2.2.1.4 Probability of pest surviving existing pest management procedures

Existing pest management procedures (including phytosanitary procedures) applied to consignments against other pests from origin to end-use, should be evaluated for effectiveness against the pest in question. The probability that the pest will go undetected during inspection or survive other existing phytosanitary procedures should be estimated.

2.2.1.5 Location and number of destinations of pathway

Such factors include:

- whether the imported commodity is to be sent to a few or many destination points in the PRA area
- proximity of entry, transit and destination points to suitable hosts
- whether the pest can reach a suitable host. Dispersal mechanisms, including vectors from the pathway to a suitable host, should be assessed.

2.2.1.6 Intended use of commodity

The use of the commodity should be considered (e.g. for processing, consumption, planting). Some uses are associated with a much higher probability of entry (e.g. planting) than others (e.g. processing). The probability associated with any growth, processing, or disposal of the commodity in the vicinity of suitable hosts should also be considered.

2.2.2 Probability of establishment

In order to estimate the probability of establishment of a pest, reliable biological information (life cycle, host range, epidemiology, survival etc.) should be obtained from the areas where the pest currently occurs. The situation in the PRA area can then be carefully compared with that in the areas where it currently occurs and expert judgement used to assess the probability of establishment. Case histories concerning comparable pests can usefully be considered. Examples of the factors to consider are:

- availability, quantity and distribution of hosts in the PRA area;
- environmental suitability in the PRA area;
- potential for adaptation of the pest;
- reproductive strategy of the pest;
- method of pest survival.

In considering probability of establishment, it should be noted that a transient pest (see ISPM No. 8, Determination of pest status in an area) may not be able to establish in the PRA area (e.g. because of unsuitable winter climatic conditions) but could still have unacceptable economic consequences (see IPPC Art. VII.3).

2.2.2.1 Availability of suitable hosts, alternate hosts and vectors

The following factors are among those that should be considered with respect to the PRA area:

- whether hosts and alternate hosts are present and how abundant or widely distributed they may be
- whether hosts and alternate hosts occur within sufficient geographic proximity to allow the pest to complete its life cycle
- whether there are near relatives, which could prove to be suitable hosts in the absence of the usual host species
- if a vector is needed for dispersal of the pest, whether it is already present in the PRA area or likely to be introduced
- whether another vector species occurs in the PRA area.

The taxonomic level at which hosts are considered should normally be the "species". The use of higher or lower taxonomic levels should be supported by scientifically sound rationale.

2.2.2.2 Suitability of environment

Factors in the environment (e.g. climate, soil, pest and host competition) that are critical to the development of the pest, its host and if applicable its vector, and to their ability to survive periods of climatic stress and complete their life cycles, should be identified. It should be noted that the environment is likely to have different effects on the pest, its host and its vector. This needs to be recognized in determining whether the interaction between these organisms in the area of origin is maintained in the PRA area to the benefit or detriment of the pest. The probability of establishment in a protected environment, e.g. in glasshouses should also be considered.

Climatic modelling systems are available to compare climatic data on the known distribution of a pest with that in the PRA area.

2.2.2.3 Cultural practices and control measures

Cultural practices in the host crop(s) should be compared to determine if there are differences in such practices between the PRA area and the origin of the pest that may influence its ability to establish.

Pest control programmes or natural enemies already in the PRA area which prevent establishment or keep populations at a level that prevents the organism from reaching pest status, should be considered. This is more likely to occur where pesticides are the major means of control, or where establishment is only likely in glasshouses. Pests for which control is not feasible should be considered to present a greater risk than those for which treatment is easily accomplished. The availability (or lack) of suitable methods for eradication should also be investigated.

2.2.2.4 Other characteristics of the pest affecting the probability of establishment

These include:

- reproductive strategy of the pests and method of pest survival. Characteristics which enable the pest to reproduce effectively in the new environment, such as parthenogenesis/self-crossing, duration of the life cycle, number of generations per year, resting stage etc., should be identified.
- genetic adaptability. Whether the species is polymorphic and the degree to which the pest has demonstrated the ability to adapt to conditions in the PRA area should be considered, e.g. host-specific races or races adapted to a wider range of habitats or to new hosts. This genotypic (and phenotypic) variability facilitates a potential pest's ability to withstand environmental fluctuations, to adapt to a wider range of habitats, to develop pesticide resistance and to overcome host resistance.
- minimum population needed for establishment. If possible, the critical pest population threshold that is required for establishment should be estimated.

2.2.3 Probability of spread after establishment

In order to estimate the probability of spread of the pest, reliable biological information should be obtained from areas where the pest currently occurs. The situation in the PRA area can then be carefully compared with that in the areas where the pest currently occurs and expert judgement used to assess the probability of spread. Case histories concerning comparable pests can usefully be considered. Examples of the factors to consider are:

- suitability of the natural and/or managed environment for natural spread of the pest
- movement with commodities or conveyances
- intended use of the commodity
- potential vectors of the pest in the PRA area
- potential natural enemies of the pest in the PRA area.

The information on probability of spread is used to estimate how rapidly a pest's potential economic importance may be expressed within the PRA area. This also has significance if the pest is liable to enter and establish in an area of low potential economic importance and then spread to an area of high potential economic importance. In addition it may be important in the risk management stage when considering the feasibility of containment or eradication of an introduced pest.

2.2.4 Conclusion on the probability of introduction and spread

The overall probability of introduction should be expressed in terms most suitable for the data, the methods used for analysis, and the intended audience. This may be quantitative or qualitative, since either output is in any case the result of a combination of both quantitative and qualitative information

The probability of introduction may be expressed as a comparison with that obtained from PRAs on other pests.

The part of the PRA area where ecological factors favour the establishment of the pest should be identified as appropriate. This is needed to define the endangered area.

2.3 Assessment of Economic Consequences

Requirements described in this step indicate what information relative to the pest and its potential host plants should be assembled, and suggest levels of economic analyses that may be carried out using that information in order to assess all the effects of the pest, i.e. the potential economic consequences. Wherever appropriate, quantitative data that will provide monetary values should be obtained. Qualitative data may also be used. Expert judgement is used throughout the process.

In many instances, detailed analysis of the estimated economic consequences is not necessary if there is sufficient evidence and it is widely agreed that the introduction of a pest will have unacceptable economic consequences. In such cases, risk assessment will primarily focus on the probability of introduction and spread. It will, however, be necessary to examine economic factors in greater detail when the level of economic consequences is in question, or when the level of economic consequences is needed to evaluate the strength of measures used for risk management or in assessing the cost-benefit of exclusion or control.

2.3.1 Types of effects

In order to estimate the potential economic importance of the pest, information should be obtained from areas where the pest currently occurs. This information should be carefully compared with the situation in the PRA area. Case histories concerning comparable pests can usefully be considered. The effects considered may be direct or indirect.

2.3.1.1 Direct pest effects

For identification and characterization of the direct effect of the pest on each potential host in the PRA area, or those effects which are host-specific, the following factors and effects should be considered:

- known or potential host plants (in the field, under protected cultivation, or in the wild)
- types, amount and frequency of damage
- crop losses, in yield and grade
- biotic and abiotic factors (climate, adaptability of pest) affecting damage and losses
- rate of spread
- control measures (including existing measures), their efficacy and cost
- effect on existing production practices
- environmental effects

For each of the potential hosts, the total area of the crop and area potentially endangered should be estimated in relation to the elements given above.

2.3.1.2 Indirect pest effects

For identification and characterization of the indirect effects of the pest in the PRA area, or those effects that are not host-specific, factors and effects such as the following should be considered:

- effects on domestic and export markets, including in particular effects on export market access. The potential consequences for market access which may result if the pest becomes established, should be estimated. This involves considering the extent of any phytosanitary regulations imposed (or likely to be imposed) by trading partners.
- changes to producer costs or input demands
- changes to domestic or foreign consumer demand for a product resulting from quality changes
- environmental and other undesired effects of control measures.
- feasibility and cost of eradication or containment
- capacity to act as a vector for other pests
- resources needed for additional research and advice
- social and other effects (e.g. tourism).

2.3.2 Analysis of economic consequences

2.3.2.1 Time and place factors

Estimations made in the previous section related to a hypothetical situation where the pest is supposed to have been introduced and to be fully expressing its potential economic consequences (per year) in the PRA area. In practice, however, economic consequences are expressed with time, and may concern one year, several years or an indeterminate period. The total economic consequences over more than one year can be expressed as net present value of annual economic consequences, and an appropriate discount rate selected to calculate net present value.

Also, introduction can be generally supposed to occur at one or few points in the PRA area and the expression of potential economic consequences will depend on the rate and manner of spread in the PRA area. The rate of spread may be estimated to be slow or rapid; in some cases, it may be supposed that spread can be prevented. Appropriate analysis may be used to estimate potential economic consequences over the period of time when a pest is spreading in the PRA area. In addition, many of the factors or effects considered above could be expected to change over time, with the consequent effects of potential economic consequences. Expert judgement and estimations will be required.

2.3.2.2 Analysis of commercial consequences

As determined above, most of the direct effects of a pest, and some of the indirect effects will be of a commercial nature, or have consequences for an identified market. These effects, which may be positive or negative, should be identified and quantified. The following may usefully be considered:

- effect of pest-induced changes to producer profits that result from changes in production costs, yields or prices
- effect of pest-induced changes in quantities demanded or prices paid for commodities by domestic and international consumers. This could include quality changes in products and/or quarantine-related trade restrictions resulting from a pest introduction.

2.3.2.3 Analytical techniques

There are analytical techniques which can be used to make a more detailed analysis of the potential economic effects of a quarantine pest. These should incorporate all of the effects that have been identified. These techniques may include:

- partial budgeting. This will be adequate, if the economic effects induced by the action of the pest to producer profits are generally limited to producers and are considered to be relatively minor.
- partial equilibrium. This is recommended if, under point 3.2.1.3, there is a significant change in producer profits, or if there is a significant change in consumer demand. Partial equilibrium analysis is necessary to measure welfare changes, or the net changes arising from the pest impacts on producers and consumers.
- general equilibrium. If the economic changes are significant to a national economy, and could cause changes to factors such as wages, interest rates or exchange rates, then general equilibrium analysis could be used to establish the full range of economic effects.

It should be recognized that use of analytical techniques will be complicated by uncertainties in the data and by the fact that for certain effects only qualitative information can be provided.

2.3.2.4 Non-commercial and environmental consequences

Some of the direct and indirect effects of a pest determined in 4.1.1 and 4.1.2 will be of an economic nature, or affect some type of value, but not have an existing market which can be easily identified. As a result, the impacts cannot be measured, or are inadequately measured, in terms of prices in established product or service markets. Examples include in particular environmental effects (ecosystem stability, biodiversity, amenity value) and social effects (employment, tourism). These impacts could be approximated with an appropriate non-market valuation method.

If quantitative measurement of such consequences is not feasible, qualitative information about the consequences may be provided. An explanation of how this information has been incorporated into decisions should also be provided.

2.3.3 Conclusion of the assessment of economic consequences

Wherever appropriate, the output of the assessment of economic consequences described in this step should be in terms of a monetary value. The economic consequences can also be expressed qualitatively or using quantitative measures without monetary terms. Sources of information, assumptions and methods of analysis should be clearly specified.

The part of the PRA area where presence of the pest will result in ecologically important loss should be identified as appropriate. This is needed to define the endangered area.

2.4 Degree of Uncertainty

Estimation of the probability of introduction of pests and of its economic consequences involves many uncertainties. In particular, this estimation is an extrapolation from the situation where the pest occurs to the hypothetical situation in the PRA area. It is important to document the areas of uncertainty and the degree of uncertainty in the assessment, and to indicate where expert judgement has been used. This is necessary for transparency and may also be useful for identifying and prioritizing research needs.

2.5 Conclusion of the Pest Risk Assessment Stage

As a result of the pest risk assessment, all or part of the PRA area should be identified as an endangered area. A quantitative or qualitative estimate of the probability of introduction of a pest or pests, and a corresponding quantitative or qualitative estimate of economic consequences, have been obtained and documented. These estimates, with associated uncertainties, are input into the pest risk management stage of the PRA

3. STAGE 3: PEST RISK MANAGEMENT

The conclusions from pest risk assessment are used to decide whether risk management is required and the strength of measures to be used. Since zero risk is not a reasonable option, the guiding principle for risk management should be to manage risk to achieve the required degree of safety that can be justified and is feasible within the limits of available options and resources. Pest risk management (in the analytical sense) is the process of identifying ways to react to a perceived risk, evaluating the efficacy of these actions, and recommending the most appropriate options to decision makers. If several equivalent options are available, the least trade-restrictive should be selected. The uncertainty noted in the assessments of economic consequences and probability of introduction should also be considered and included in the selection of a pest management option.

3.1 Level of Risk

The principle of "managed risk" (ISPM No. 1) states that: "Because some risk of introduction of a quarantine pest always exists, countries shall agree to a policy of risk management when formulating phytosanitary measures". In implementing this principle, countries must decide what level of risk is acceptable to them.

The acceptable level of risk may be expressed in a number of ways, such as:

- reference to existing phytosanitary requirements
- indexed to estimated economic losses
- expressed on a scale of risk tolerance
- compared with the level of risk accepted by other countries.

3.2 Technical Information Required

The decision to be made in the pest risk management process will be based on the information collected during the preceding stages of PRA. This information will be composed of:

- reasons for initiating the process
- estimation of the probability of introduction to the PRA area
- evaluation of potential economic consequences in the PRA area.

3.3 Acceptability of Risk

Overall risk is determined by the examination of the outputs of the assessments of the probability of introduction and the economic impact. If the risk is found to be unacceptable, then the first step in risk management is to identify possible phytosanitary measures that will reduce the risk to, or below an acceptable level. If the risk is already acceptable, then the management option would be only to recommend the measures (monitoring or audit) necessary to ensure that future changes in the pest risk status are identified.

3.4 Identification and Selection of Appropriate Risk Management Options

Appropriate measures should be chosen based on their effectiveness in reducing the probability of introduction of the pest. The choice should be based on the following considerations, which include several of the Principles of Plant Quarantine as related to International Trade (ISPM No. 1):

- phytosanitary measures shown to be cost-effective and feasible. The benefit from the use of phytosanitary measures is that the pest will not be introduced and the PRA area will, consequently, not be subjected to the potential economic consequences. The cost-benefit analysis for each of the minimum measures found to provide acceptable security may be estimated. Those measures with an acceptable benefit-to-cost ratio should be considered.
- principle of "minimal impact". The least trade-restrictive measures should be selected. Measures should be applied to the minimum area necessary for the effective protection of the endangered area.
- reassessment of previous requirements. No additional measures should be imposed if existing measures are effective.
- principle of "equivalence". If different phytosanitary measures with the same effect are identified, they should be accepted as alternatives.
- principle of "non-discrimination". If the pest under consideration is established in the PRA area but of limited distribution and under official control, the phytosanitary measures in relation to import should not be more stringent than those applied within the PRA area. Likewise, phytosanitary measures should not discriminate between exporting countries of the same phytosanitary status.

The measures listed below are examples of those that are most commonly applied to traded commodities. They are applied to pathways, usually consignments of a host, from a specific origin. The measures should be as precise as possible as to consignment type (hosts, parts of plants) and origin so as not to act as barriers to trade by limiting the import of products where this is not justified. Combinations of two or more measures may be needed in order to reduce the risk to an acceptable level. The available measures can be classified into broad categories which relate to the pest status of the pathway in the country of origin. These include measures:

- applied to the consignment,
- applied to prevent or reduce original infestation in the crop
- to ensure the area or place of production is free from the pest
- concerning the prohibition of commodities

Other options may arise in the PRA area (restrictions on the use of a commodity), control measures, introduction of a biological control agent, eradication, containment). Such options should also be evaluated and will apply in particular if the pest is already present but not widely distributed in the PRA area.

3.4.1 Options for consignments

Measures may include any combinations of the following:

- inspection or testing for freedom from a pest or to a specified pest tolerance. When a sampling system is used to test for pest freedom, it should be noted that such a system will only indicate that the infestation level is below what can be detected with the sample size used.
- prohibition of parts of the host.
- a pre-entry or post-entry quarantine system. This could be considered to be the most intensive form of inspection or testing and can only be used where the consignment size permits. This system may be the only option for certain latent pests.
- specified conditions of preparation of the consignment (e.g. handling to prevent infestation or reinfestation).
- specified treatment of the consignment. Such treatments are applied post-harvest and could include chemical, thermal, irradiation or other physical methods.
- restrictions on end use, distribution and periods of entry of the commodity.

Measures may also be applied to restrict the import of consignments of pests.

3.4.2 Options preventing or reducing original infestation in the crop

Measures may include:

- treatment of the crop, field, or place of production.
- restriction of the composition of a consignment so that it is composed of plants belonging to resistant or less susceptible species.
- growing plants under specially protected conditions (glasshouse, isolation).
- harvesting of plants at a certain age or a specified time of year.
- production in a certification scheme. An officially monitored plant production scheme usually involves a number of carefully controlled generations, beginning with nuclear stock plants of high health status. It may be specified that the plants be derived from plants within a limited number of generations.

3.4.3 Options ensuring that the area, place or site of production is free from the pest

Measures may include:

- pest-free area. Requirements for pest-free area status are described in Requirements for the Establishment of Pest Free Areas (ISPM No. 4).
- pest free place of production or pest-free production site. Requirements are described in *Requirements for the establishment of pest free places of production and pest-free production sites (ISPM No. 10)*.

3.4.4 Prohibition of commodities

If no satisfactory measure to reduce risk to an acceptable level can be found, the final option may be to prohibit importation of the relevant commodities. This should be viewed as a measure of last resort and should be considered in light of the anticipated efficacy, especially in instances where the incentives for illegal import may be significant.

3.5 Phytosanitary Certificates and other Compliance Measures

Risk management includes the consideration of appropriate compliance procedures. The most important of these is phytosanitary certification (ISPM No. 7). Issue of a phytosanitary certificate (ISPM No. 11) provides official assurance that a consignment is “considered to be free from the quarantine pests specified by the importing contracting party and to conform with the current phytosanitary requirements of the importing contracting party“. It thus confirms that the specified risk management options have been followed. An additional declaration may be required to indicate that a particular measure has been carried out. Other compliance measures may be used subject to bilateral or multilateral agreement.

3.6 Conclusion of Pest Risk Management

The result of the pest risk management procedure will be the selection of one or more management options that have been found to lower the risk associated with the pest(s) to an acceptable level. These management options form the basis of phytosanitary regulations or requirements.

The application and maintenance of such regulations is subject to certain obligations, in the case of contracting parties to the IPPC or members of the World Trade Organization.

3.6.1 Pest listing

All pests for which phytosanitary regulations or requirements are specified should be added to a list of regulated pests and made available to the IPPC Secretariat, RPPOs of which the country is a member, and on request to other NPPOs (IPPC Art VII.2i).

3.6.2 Publication and notification obligations

Phytosanitary requirements must be published and made available to other countries (IPPC, Art VII.2b; (WTO SPS Agreement, Annex B). The rationale for requirements must be made available on request to other contracting parties (IPPC, Art VII.2c). WTO Members are obliged to follow notification procedures (see Annex B, SPS Agreement).

3.6.3 Monitoring and review of phytosanitary measures

The principle of "modification" states: "As conditions change, and as new facts become available, phytosanitary measures shall be modified promptly, either by inclusion of prohibitions, restrictions or requirements necessary for their success, or by removal of those found to be unnecessary" (ISPM No. 1, Principles of plant quarantine as related to international trade).

Thus, the implementation of particular phytosanitary measures should not be considered to be permanent. After application, the success of the measures in achieving their aim should be determined by monitoring during use. This is often achieved by inspection of the commodity on arrival, noting any interceptions or any entries of the pest to the PRA area. The information supporting the pest risk analysis should be periodically reviewed to ensure that any new information that becomes available does not invalidate the decision taken.

4. DOCUMENTATION OF PEST RISK ANALYSIS

The IPPC and the principle of "transparency" (ISPM No. 1) require that countries must, on request, make available the rationale for phytosanitary requirements. The whole process from initiation to pest risk management should be sufficiently documented so that when a review or a dispute arises, the sources of information and rationale used in reaching the management decision can be clearly demonstrated.

The main elements of documentation are:

- purpose for the PRA
- pest, pest list, pathways
- sources of information
- categorized pest list
- conclusions of risk assessment
 - probability
 - consequences
- risk management
 - options identified
 - options selected

AMENDMENTS TO THE GLOSSARY OF PHYTOSANITARY TERMS

ISC-Final (for country consultation) -- May 2000

1. New terms

Devitalization	A treatment rendering seeds or other plant or plant products incapable of growth
Emergency action	A prompt phytosanitary action undertaken in an abnormal or unexpected phytosanitary situation
Emergency measure	A phytosanitary regulation or procedure established in an abnormal or unexpected phytosanitary situation. An emergency measure may or may not be a provisional measure
Growing period (for a crop)	Period of the production cycle of the crop
Official control	The active enforcement of mandatory phytosanitary regulations and the application of mandatory phytosanitary procedures with the objective of eradication or containment of quarantine pests or the management of regulated non-quarantine pests
Phytosanitary action	Any official operation, such as inspections, tests, surveillance, or treatments, undertaken to implement phytosanitary regulations or procedures in relation to consignments, regulated articles, places of production, areas or where otherwise justified
Provisional measure	A phytosanitary regulation or procedure established without full technical justification owing to current lack of adequate information. They are subjected to full technical justification as soon as possible

2. Revised Terms

Bulbs and tubers	A commodity class for dormant underground organs of plants intended for planting (includes corms and rhizomes)
Commodity	A type of plant, plant product, or other article being moved for trade or other purpose
Consignment	A quantity of plants, plant products and/or other articles being moved from one country to another and covered, when required, by a single phytosanitary certificate (a consignment may be composed of one or more lots)
Cut flowers and branches	A commodity class for fresh parts of plants intended for decorative use and not for planting
Fruits and vegetables	A commodity class for fresh parts of plants intended for consumption or processing and not for planting
Grain	A commodity class for seeds intended for processing or consumption and not for planting (See Seeds)

Phytosanitary procedure	Any officially prescribed method for implementing phytosanitary regulations including the performance of inspections, tests, surveillance or treatments in connection with regulated pests
Phytosanitary regulation	Official rule to prevent the introduction and/or spread of quarantine pests, or to limit the economic impact of regulated non-quarantine pests, including establishment of procedures for phytosanitary certification
Plants in tissue culture	A commodity class for plants in an aseptic medium in a closed container
Regulated area	An area into which, within which and/or from which plants, plant products and other regulated articles are subjected to phytosanitary regulations or procedures in order to prevent the introduction and/or spread of quarantine pests or to limit the economic impact of regulated non-quarantine pests
Seeds	A commodity class for seeds for planting not for consumption or processing (see Grain)
Wood	A commodity class for round wood, sawn wood, wood chips or dunnage, with or without bark

3. Terms which have been left unchanged, despite a suggestion for change

Area
Commodity class
Country of origin (of a consignment of plants)
Interception (of a consignment)
Phytosanitary measure
Practically free
Quarantine pest

4. Terms which have been deleted from the Glossary, or proposed but not added

Bark
Country of re-export
Country of transit
Growing season
Occurs at low levels
Requirement (phytosanitary)
Unlisted (or non-listed) pest / unspecified pest

5. Recommendations for other terms

Bark, Bark free wood and *Solid wood packing material* - refer to the WG on non-manufactured wood packaging. Indicate the possible need to also develop an explanatory document on bark freedom.

Quarantine pest - refer to the glossary WG for consideration of a draft definition which may replace the existing definition in the future.

Practically free - refer to the glossary WG to consider the placement of “of a consignment, field, or place of production” in parenthesis with the term rather than in the definition.

Pest categorization, Pest risk assessment, and Pest risk management - proceed with development in the draft standard *PRA for quarantine pests*.

FORMAT FOR ISPM SPECIFICATIONS

adopted by the
First Interim Standards Committee -- May 2000

Title or proposed title:

Identify (by agreed or proposed title) the topic or document which is the basis for the specification.

Scope

Describe the scope and purpose of the standard.

Tasks:

Describe specific needs, what is to be done, i.e., review, revise, update, formulate, etc. and expectations as well as the modus operandi for completing the task.

Provision of resources:

Identify source(s) of resources.

Proposed work programme:

Indicate expected timeframe for completion and tentative/proposed meeting dates if known.

Steward:

Identify individual responsible for management of the task.

Collaborator:

Identify any organization(s) providing support.

Expertise:

Identify the nature of expertise required and the number of experts needed.

Participants:

Identify experts or other individuals involved or proposed in accomplishing the task.

Approval:

Note the date and session of approval by the Standards Committee and the session when introduced into the work programme by the ICPM.

References

Identify discussion papers, draft standards, other relevant documents or literature.

GLOSSARY OF PHYTOSANITARY TERMS

Supplement No. 1

**Guidelines on the Interpretation and Application of the
Concept of Official Control for Regulated Pests****1. Purpose**

The words “officially controlled” express an essential concept in the definition of a quarantine pest. The Glossary of Phytosanitary Terms defines "Official" as "Established, authorized or performed by an NPPO" and "Control" as "Suppression, containment or eradication of a pest population". However, for phytosanitary purposes, the concept of "official control" is not adequately expressed by the combination of these two definitions. The purpose of this guideline is to describe more precisely the interpretation of the concept of official control and its application in practice.

2. Scope

This guideline refers only to the official control of regulated pests. For the purposes of this guideline, the relevant regulated pests are quarantine pests which are present in an importing country but not widely distributed, and regulated non-quarantine pests.

3. Definition

Official control is defined as:

The active enforcement of mandatory phytosanitary regulations and the application of mandatory phytosanitary procedures with the objective of eradication or containment of quarantine pests or for the management of regulated non-quarantine pests.

4. General requirements

Official control is subject to the "Principles of plant quarantine as related to international trade", in particular the principles of non-discrimination, transparency, equivalence and risk analysis.

In the case of a quarantine pest which is present but not widely distributed, and possibly in the case of certain regulated non-quarantine pests, the importing country should define infested area(s), endangered area(s) and protected area(s).

Official control includes:

- eradication and/or containment in infested area(s);
- surveillance in endangered area(s); and
- controls on movement into protected area(s) including measures applied at import.

All official control programmes have elements that are mandatory. At minimum, programme evaluation and pest surveillance are required in official control programmes to determine the

need for and effect of control to justify measures applied at import for the same purpose. Measures applied at import should be consistent with the principle of non-discrimination.

For quarantine pests, eradication and containment may have an element of suppression. For regulated non-quarantine pests, suppression may be used to avoid unacceptable economic impact as it applies to the intended use of plants for planting.

5. Specific requirements

5.1 Non-discrimination

The principle of non-discrimination between domestic and import requirements is of fundamental importance. In particular, an exporting country must be assured that requirements for imports are not more stringent than the effect of official control in an importing country.

There must therefore be consistency between import and domestic requirements:

- import requirements should not be more stringent than domestic requirements;
- domestic and import requirements should be the same or have an equivalent effect;
- mandatory elements of domestic and import requirements should be the same;
- the intensity of inspection at import should be the same as equivalent processes in domestic control programmes;
- in the case of non-compliance, the same or equivalent actions should be taken at import as are taken domestically;
- if a tolerance is applied within a national programme, the same tolerance should be applied to equivalent imported material. In particular, if no action is taken in the official control programme if the infestation level does not exceed a particular level, then no action should be taken for an imported consignment if its infestation level does not exceed that same level. Compliance with import tolerance is generally determined by inspection or testing at entry, whereas the tolerance for domestic consignments should be determined at the last point where official control is applied.

5.2 Transparency

The import and domestic requirements for official control should be documented and made available, on request.

5.3 Technical justification (risk analysis)

Domestic and import requirements should be technically justified and result in non-discriminatory risk management.

5.4 Enforcement

The domestic enforcement of official control programmes should be equivalent to the enforcement of import requirements. Enforcement should include:

- legal authority;
- operational implementation;
- evaluation and review;
- official action for non-compliance.

5.5 Mandatory nature of official control

Official control is mandatory in the sense that all persons involved are legally bound to perform the actions required. The scope of official control programmes for quarantine pests is completely mandatory (e.g. procedures for eradication campaigns), whereas the scope for regulated non-quarantine pests is mandatory only in certain circumstances (e.g. official certification programmes).

5.6 Area of application

An official control programme can be applied at national, sub-national or on an area basis. The area of application of official control measures must be specified. Any import restrictions must have the same effect as the measures applied internally for official control.

5.7 NPPO authority and involvement in Official Control

Official control should:

- be established or recognized by the National Government or NPPO under appropriate legislative authority;
- be performed, managed, supervised or, at minimum, audited/reviewed by the NPPO;
- have enforcement assured by the National Government or NPPO;
- be modified, terminated, or lose official recognition as necessary according to the National Government or NPPO.

Responsibility and accountability for official control programmes rests with the National Government. Agencies other than the NPPO may be responsible for aspects of official control programmes, and certain aspects of official control programmes may be the responsibility of sub-national authorities or the private sector. However, because the NPPO is responsible for measures applied at import which may be based on official control programmes, and also responsible for official communication with other NPPOs regarding import requirements and actions taken at import, the NPPO must be fully aware of all aspects of official control programmes in their country.

References:

Report of the ICPM Open Ended Working Group on Official Control (22-24 March 2000, Bordeaux, France); IPPC Secretariat, FAO, Rome.

DRAFT STANDARD
MAY, 2000
ISC-Final (for country consultation)

**INTERNATIONAL STANDARDS FOR
PHYTOSANITARY MEASURES**

**GUIDELINES FOR THE NOTIFICATION OF
NON-COMPLIANCE**



**Secretariat of the International Plant Protection Convention
Food and Agriculture Organization
of the United Nations
Rome, 200-**

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GUIDELINES FOR THE NOTIFICATION OF NON-COMPLIANCE

INTRODUCTION

Scope

This standard describes the actions to be taken by contracting parties regarding the notification of:

- significant instances of failure to comply with specified phytosanitary measures including the interception of specified regulated pests;
- significant instances of failure to comply with documentary requirements for phytosanitary certification;
- emergency action taken on the interception of a regulated pest not listed as being associated with the commodity from the exporting country and posing a potential risk to the importing contracting party; and
- emergency action taken on the interception of an uncategorized pest.

References

Determination of pest status in an area, 1998. ISPM Pub. No. 8, FAO, Rome.

Export certification systems, 1997. ISPM Pub. No. 7, FAO, Rome.

Glossary of phytosanitary terms, 1999. ISPM Pub. No. 5, FAO, Rome.

Guidelines for phytosanitary certificates (ISPM in draft).

International Plant Protection Convention, 1997. FAO, Rome.

Definitions, Abbreviations and Acronyms

Area	An officially defined country, part of a country or all or parts of several countries
Certificate	An official document which attests to the phytosanitary status of any consignment affected by phytosanitary regulations
Commodity class	A category of similar commodities that can be considered together in phytosanitary regulations
Consignment	A quantity of plants, plant products and/or other articles being moved from one country to another and covered, when required, by a single phytosanitary certificate (a consignment may be composed of one or more lots)
Consignment in transit	Consignment which passes through a country without being imported, and without being exposed in that country to contamination or infestation by pests. The consignment may not be split up, combined with other consignments or have its packaging changed

Detention	Keeping a consignment in official custody or confinement for phytosanitary reasons
Emergency action	A prompt phytosanitary action undertaken in an abnormal or unexpected phytosanitary situation
Interception (of a consignment)	The refusal or controlled entry of an imported consignment due to failure to comply with phytosanitary regulations
Interception (of a pest)	The detection of a pest during inspection or testing of an imported consignment
Introduction	The entry of a pest resulting in its establishment
IPPC	Acronym for the International Plant Protection Convention, as deposited in 1951 with FAO in Rome and as subsequently amended
NPPO	Acronym for National Plant Protection Organization
Official	Established, authorized or performed by a National Plant Protection Organization
Pest	Any species, strain or biotype of plant, animal or pathogenic agent injurious to plants or plant products
Pest status (in an area)	Presence or absence, at the present time, of a pest in an area, including where appropriate its distribution, as officially determined using expert judgement on the basis of current and historical pest records and other information
Phytosanitary action	Any official operation such as inspections, tests, surveillance, or treatments, undertaken to implement phytosanitary regulations in relation to consignments, regulated articles, places of production, areas or where otherwise justified
Phytosanitary certificate	Certificate patterned after the model certificates of the IPPC
Phytosanitary measure	Any legislation, regulation or official procedure having the purpose to prevent the introduction and/or spread of pests
Phytosanitary regulation	Official rule to prevent the introduction and/or spread of quarantine pests, or to limit the economic impact of regulated non-quarantine pests, including establishment of procedures for phytosanitary certification
Regulated non-quarantine pest	A non-quarantine pest whose presence in plants for planting affects the intended use of those plants with an economically unacceptable impact and which is therefore regulated within the territory of the importing contracting party

Regulated pest	A quarantine pest or a regulated non-quarantine pest
RPPO	Acronym for Regional Plant Protection Organization
Spread	Expansion of the geographical distribution of a pest within an area
Treatment	Officially authorized procedure for the killing, removal or rendering infertile of pests

Outline of Requirements

The International Plant Protection Convention (IPPC) makes provision for contracting parties to take actions for non-compliance with phytosanitary requirements including the interception of regulated pests or pests which are not categorized but are believed to pose potential phytosanitary threats. The importing contracting party is required to notify the exporting contracting party regarding significant phytosanitary actions so that the exporting contracting party understands the basis for non-compliance and may investigate and correct as necessary the cause. Importing contracting parties may request a report of the results of such investigations.

Required information for notification includes the type of notification, the reference number, the date of notification, the identity of the importing and exporting NPPOs, the identity of the consignment and date of interception, the reasons for interception, information regarding the nature of non-compliance, and the phytosanitary measures applied.

An exporting contracting party should investigate significant instances of non-compliance to determine the possible cause. For consignments in transit, an instance of non-compliance with the requirements of the transit country should be notified to the exporting country. In cases of re-export associated with a phytosanitary certificate for re-export, the obligations of the exporting contracting party apply to the re-exporting contracting party.

Countries that are not contracting parties to the IPPC are encouraged to use these notification systems.

REQUIREMENTS

1. Purpose of notifications

Notifications of non-compliance are provided by the importing contracting party to the exporting contracting party to identify significant failures to comply with specified phytosanitary requirements, to help in investigating the cause of the non-compliance, and to facilitate steps to avoid recurrence. Thus, notification is normally bilateral, although there may be arrangements in place for the notification of other contracting parties, non-contracting parties, or RPPOs who have agreed to share such information.

2. The use of notification information

Notifications and information used for notification are valuable for official purposes but may also be easily misunderstood or misused if taken out of context or used imprudently. To minimise the potential for misunderstandings or abuse, contracting parties should be careful to ensure that notifications and information about notifications is distributed in the first instance only to the exporting contracting party. The importing contracting party should consult with the exporting contracting party and provide the opportunity for the exporting contracting party to validate non-compliance, investigate, and correct as necessary. This should be done before changes in the phytosanitary status of a commodity or area, or other failures of phytosanitary systems in the exporting country are confirmed or reported more widely (See also good reporting practices for interceptions in ISPM No. 8, *Determination of pest status in an area*).

3. Basis for notification systems

The establishment of systems for the routine practice of notification is based on several provisions of the IPPC, summarized as follows:

- Art VII.2f states that importing contracting parties must notify exporting or re-exporting contracting parties of significant instances of non-compliance with phytosanitary certification and that on request, the exporting or re-exporting contracting party should report on its investigation of the non-compliance.
- Art VII.6 states that contracting parties may take emergency actions and must report these to the exporting or re-exporting contracting party.
- Art VIII.1 states that contracting parties will cooperate to achieve the aims of the Convention.
- Art VIII.2 states that contracting parties must identify an official contact point for the exchange of information.

Significant non-compliance of a consignment with phytosanitary requirements should be notified to the exporting contracting party whether or not the consignment requires a phytosanitary certificate. Emergency actions based on a pest should also be notified to the exporting contracting party.

The use of notification for other purposes is voluntary but in all instances should only be undertaken with the aim of international cooperation to prevent the introduction and/or spread

of regulated pests (IPPC Art I and VIII). Countries that are not contracting parties to the IPPC are encouraged to use these notification systems.

4. Basis for notification

The notification of an interception of a consignment may result from:

- significant instances of non-compliance requiring phytosanitary action;
- emergency actions.

In most instances, it is the interception of regulated pests listed for a commodity that is the basis for the interception of consignments and subsequent phytosanitary actions.

4.1 Significant instances of non-compliance

Contracting parties may agree bilaterally on what instances of non-compliance are considered significant for notification purposes. In the absence of such agreement, the importing contracting party should judge the degree of significance associated with instances of non-compliance as the basis for notification. This may be done on a case-by-case basis or within the framework of a general policy on notification. In particular, contracting parties may consider the following to be significant:

- failure to comply with phytosanitary measures;
- the detection of regulated pests;
- failure to comply with documentary requirements, including
 - uncertified alterations or erasures to phytosanitary certificates;
 - serious deficiencies in information on phytosanitary certificates;
- prohibited consignments;
- prohibited articles in consignments of enterable material (e.g. soil);
- evidence of failure of specified treatments;
- repeated instances of prohibited commodities in (e.g. small, non-commercial quantities carried by passengers or sent by mail).

4.2 Emergency action

Emergency actions are taken on:

- the interception of a regulated pest not listed as being associated with the commodity from the exporting country and posing a potential risk to the importing contracting party;
- the interception of an uncategorized pest.

5. Types of notification

Notifications may be preliminary or final depending on the need to notify the exporting contracting party before a final decision is taken. Each importing contracting party is responsible for the validation of non-compliance notifications and the justification of phytosanitary measures that may be applied.

5.1 Preliminary notifications

Preliminary notifications are used voluntarily when appropriate to explain the detention of a consignment where a possible non-compliance or emergency situation is indicated but needs confirmation. They are provided to the exporting contracting party and should be sent as soon as possible. Preliminary notifications should be followed by confirmation or retraction.

5.2 Final notifications

Final notification should be provided promptly once non-compliance or the need for emergency action has been confirmed and phytosanitary actions taken. Final notifications should be provided to the exporting contracting party. Where a final notification follows a preliminary notification, the final notification should refer to the preliminary notification. There may be arrangements in place for the sharing of notification with contracting parties or RPPOs where the importing contracting party has agreed to share such information.

6. Information included in a notification

Notifications should follow a standardized format and include certain minimum information. NPPOs are encouraged to provide additional information where such information is deemed relevant and important or has been specifically requested by the exporting country.

6.1 Required information

Contracting parties should use a consistent format for notification including the following information¹:

- *Type of notification* - i.e., preliminary or final
- *Reference number* - the reporting country should have a means of tracing the communication sent to an exporting country. This could be a unique reference number or the number phytosanitary certificate associated with the consignment.
- *Date* - the date on which notification is sent should be noted.
- *Identity of the NPPO* of the importing contracting party.
- *Identity of the NPPO* of the exporting contracting party.
- *Identity of consignment* - consignments should be identified by the phytosanitary certificate number if appropriate or by references to other documentation and including commodity class and plant species.

¹ Note: Preliminary notification will be necessarily incomplete.

- *Date of interception* of the consignment.
- *Reasons for interception* of the consignment.
- *Specific information regarding the nature of the non-compliance* including:
 - identity of pest (see also section 8 below);
 - where appropriate, whether part or all of the consignment is affected;
 - problems with documentation;
 - actual non-compliance against phytosanitary requirements.
- *Phytosanitary measures applied* - the phytosanitary measures should be specifically described and the parts of the consignment affected by the measures identified.
- *Authentication marks* - the notifying authority should have a means for identifying valid notifications (e.g. stamp, seal, letterhead, authorized signature).

Only communication from official contact points is considered to be authentic unless the NPPO of the importing country indicates other official sources.

6.2 Supporting information

Supporting information may include as appropriate:

- Copy of the phytosanitary certificate or other relevant documents;
- Diagnostic results, possibly also identifying the diagnostician and/or laboratory;
- Pest association i.e., details on where the pest was found or how it affects the consignment;
- Other information deemed to be useful for the exporting country to be able to identify and correct non-compliance.

6.3 Forms, codes, abbreviations or acronyms

Where forms, codes, abbreviations or acronyms are used in notification or supporting information, contracting parties should make appropriate explanatory material available on request.

6.4 Language

The language(s) used for notification and supporting information will be the language(s) preferred by the notifying contracting party except where bilaterally agreed otherwise. Where information is requested through contact points, information should be supplied in one of the FAO languages (IPPC Article XIX.3e).

7. Documentation and means of communication

Notification documents, supporting information and associated records should be kept by the notifying contracting party for at least one year after the date of notification. Electronic notifications should be used for efficiency and expediency whenever possible.

8. Pest identification

The identification of intercepted pests should be undertaken to the extent necessary for the determination of appropriate phytosanitary or emergency action. Where this is not possible or feasible, the results of any identification undertaken and the reasons for incomplete or missing information in this regard should be included in the notification (e.g. treatment chosen by the importer instead of full identification).

When identifying intercepted pests, importing contracting parties should:

- be able to describe, on request, the procedures used for diagnosis, including the identity of the diagnostician and/or laboratory, and should retain, for an appropriate period, evidence such as appropriate specimens or material to allow validation of potentially controversial determinations;
- indicate the life-stage of the pest;
- provide identification to species level where possible or to a taxonomic level that justifies the official actions taken.

9. Investigation of a non-compliance notification

The exporting contracting party should investigate significant instances of non-compliance to determine the possible cause with a view to avoid recurrence. Upon request, the results of the investigation should be reported to the importing contracting party. Where the results of the investigation indicate a change of pest status this information should be communicated according to the good practices noted in ISPM No. 8: *Determination of pest status in an area*.

10. Transit

For a consignment in transit, any instance of non-compliance with the requirements of the transit country should be notified to the exporting contracting party. Where the transit country has reason to believe that the non-compliance may also be a problem for the country of final destination, the transit country may also provide a notification to the country of final destination. The country of final destination should copy its notifications to any transit country involved.

11. Re-export

In cases of re-export associated with a phytosanitary certificate for re-export, the obligation and other provisions pertaining to the exporting contracting party apply to the re-exporting contracting party.

DRAFT STANDARD
MAY, 2000
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**INTERNATIONAL STANDARDS FOR
PHYTOSANITARY MEASURES**

**GUIDELINES FOR THE PREPARATION
OF REGULATED PEST LISTS**



**Secretariat of the International Plant Protection Convention
Food and Agriculture Organization
of the United Nations
Rome, 200-**

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GUIDELINES FOR THE PREPARATION OF REGULATED PEST LISTS

INTRODUCTION

Scope:

This standard describes the role of lists of regulated pests as they relate to the application of phytosanitary measures, and procedures to establish, maintain and distribute these lists as the means for NPPOs to specify the pests for which phytosanitary measures are applied.

References

- International Plant Protection Convention* (1997)
- Glossary of phytosanitary terms* (ISPM No. 5; 1999)
- Guidelines for surveillance* (ISPM No. 6; 1998)
- Guidelines for pest risk analysis* (ISPM No. 2; 1996)
- Determination of pest status in an area* (ISPM No. 8; 1999)
- Pest risk analysis for quarantine pests* (ISPM in draft)
- Guidelines for phytosanitary certificates* (ISPM in draft)
- Guidelines for the notification non-compliance* (ISPM in draft)

Definitions, Abbreviations and Acronyms:

Certificate	An official document which attests to the phytosanitary status of any consignment affected by phytosanitary regulations
Commodity	A type of plant, plant product or other regulated article being moved for trade or other purpose
IPPC	Acronym for the International Plant Protection Convention, as deposited in 1951 with FAO in Rome and as subsequently amended
NPPO	Acronym for National Plant Protection Organization
Official	Established, authorized or performed by a National Plant Protection Organization
Official control	The active enforcement of mandatory phytosanitary regulations and the application of mandatory phytosanitary procedures with the objective of eradication or containment of quarantine pests or the management of regulated non-quarantine pests
Pest	Any species, strain or biotype of plant, animal or pathogenic agent injurious to plants or plant products
Pest risk analysis	The process of evaluating biological or other scientific and economic evidence to determine whether a pest should be regulated and the strength of measures to be taken against it

Pest status (in an area)	Presence or absence, at the present time, of a pest in an area, including where appropriate its distribution, as officially determined using expert judgement on the basis of current and historical pest records and other information
Phytosanitary action	Any official operation such as inspections, tests, surveillance, or treatments, undertaken to implement phytosanitary regulations in relation to consignments, regulated articles, places of production, areas or where otherwise justified
Phytosanitary certificate	Certificate patterned after the model certificates of the IPPC
Phytosanitary certification	Use of phytosanitary procedures leading to the issue of a phytosanitary certificate
Phytosanitary measure	Any legislation, regulation or official procedure having the purpose to prevent the introduction and/or spread of pests
Phytosanitary procedure	Any officially prescribed method for implementing phytosanitary regulations including the performance of inspections, tests, surveillance or treatments in connection with regulated pests
Phytosanitary regulation	Official rule to prevent the introduction and/or spread of quarantine pests, or to limit the economic impact of regulated non-quarantine pests, including establishment of procedures for phytosanitary certification
Quarantine pest	A pest of potential economic importance to the area endangered thereby and not yet present there, or present but not widely distributed and being officially controlled
Regulated article	Any plant, plant product storage place, packaging, conveyance, container, soil and any other organism, object or material capable of harboring or spreading pests, deemed to require phytosanitary measures, particularly where international transportation is involved
Regulated non-quarantine pest	A non-quarantine pest whose presence in plants for planting affects the intended use of those plants with an economically unacceptable impact and which is therefore regulated within the territory of the importing contracting party
Regulated pest	A quarantine pest or a regulated non-quarantine pest

Outline of Requirements

The International Plant Protection Convention (IPPC) requires contracting parties to establish and update lists of regulated pests for phytosanitary certification purposes. This standard provides guidelines for meeting these obligations by describing lists of regulated pests, their purpose, and their relationship to phytosanitary procedures.

General lists of regulated pests are established by NPPOs of importing contracting parties for the listing of all pests for which phytosanitary action may be taken. Specific lists of regulated pests are a subset of general lists. Specific lists are provided on request to the NPPOs of exporting contracting parties as the means to specify regulated pests for the certification of particular commodities. Criteria and information required for listing regulated pests are described. Procedures for establishing, requesting, and distributing lists are included.

Countries that are not contracting parties to the IPPC are encouraged to use these pest listing procedures.

GENERAL REQUIREMENTS

1. Pest listing

Pest lists are established and used for many different purposes. One of the most fundamental and essential pest listing efforts is associated with developing and maintaining adequate information on the status of pests occurring within territories under the jurisdiction of the NPPO. This type of information is a prerequisite for the determination of pest status for exotic organisms (see IPPC Art VII.2j) and is therefore crucial to pest listing exercises such as those discussed herein. Likewise, lists of pests associated with specific crops or commodities are necessary prerequisites for Pest risk analysis (PRA), which itself involves stages of pest listing and provides the basis for determining whether phytosanitary measures are justified and the strength of measures to be applied for specific pests and circumstances.

2. Necessity for lists of regulated pests

The listing and distribution of lists of regulated pests is an explicit obligation for contracting parties to the IPPC and should also be observed by non-contracting parties. Article VII.2i states:

Contracting parties shall, to the best of their ability, establish and update lists of regulated pests, using scientific names, and make such lists available to the Secretary, to regional plant protection organizations of which they are members and, on request, to other contracting parties.

This is closely associated with other provisions of Article VII regarding the provision of phytosanitary requirements, restrictions and prohibitions (VII.2b) and the provision of the rationale for phytosanitary requirements (VII.2c).

In addition, the certifying statement of the Model Phytosanitary Certificate annexed to the Convention implies that lists of regulated pests are necessary by referring to:

... quarantine pests specified by the importing contracting party and ... phytosanitary requirements of the importing contracting party, including those for regulated non-quarantine pests.

In instances where a list of regulated pests is not supplied by the importing contracting party, it is only possible for the NPPO of the exporting contracting party to certify based on known requirements.

3. Types of lists of regulated pests

A general list of regulated pests plays a central role in preventing the introduction and/or spread of harmful pests and facilitating safe trade by enhancing transparency. This list is established and maintained by the NPPO of the importing contracting party to identify pests that have been determined by the NPPO to require phytosanitary measures. Listed pests are the basis for phytosanitary measures.

A specific list of regulated pests, which should be a subset of the general list, is provided by the importing contracting party to the exporting contracting party as the means to make known to the exporting contracting party those pests for which inspection, testing or other specific phytosanitary procedures are required for certification of particular commodities.

In responding to a request for pests specified in order to conform to current phytosanitary requirements, a country may supply a general or a specific list.

4. Purpose of a general list of regulated pests

The primary purpose for establishing and maintaining a general list of regulated pests is to increase transparency associated with the application of phytosanitary measures by making clear the pest basis for measures. A list of pests is made to systematically identify regulated pests that have been determined by the NPPO to be the basis for phytosanitary requirements. It is also to facilitate listing regulated pests that are the object of specific inspection, testing or other specific phytosanitary procedures required for certification purposes.

A list is established by the NPPO of the importing contracting party based on decisions taken regarding the need for phytosanitary measures and the establishment of corresponding requirements for specific pests, often in conjunction with specific articles such as commodities, or specific situations such as location or a season. PRA provides the technical justification for associating pests with phytosanitary measures and the basis for determining the strength of measures to be applied.

This list does not necessarily communicate requirements but provides a convenient and timely summary of pests decided by the NPPO to require phytosanitary measures. This list is subject to modification as a result of new information, PRA, and changing conditions. It should therefore not be considered either permanent or comprehensive.

Pest lists may also be useful as the basis for harmonization where several contracting parties with similar and shared phytosanitary concerns agree on pests that are listed for a group of countries or a region. This may be done through regional plant protection organizations.

5. Purpose of a specific list of regulated pests

The primary purpose of a specific list of regulated pests is to make known to the exporting contracting party those regulated pests for which inspection, testing or other specific phytosanitary procedures are required by the importing contracting party for certification of particular commodities. The means for specifying regulated pests is a pest list drawn up by the importing contracting party for phytosanitary certification purposes based on a PRA, including the determination of import conditions for a consignment in advance of its import.

6. Phytosanitary actions for listed and unlisted pests

The detection in an imported consignment of a pest which appears in a general or specific list of regulated pests normally justifies phytosanitary action, whereas action for a pest which is not listed requires a sound technical basis.

6.1 Phytosanitary actions for listed pests

An NPPO may decide not to apply phytosanitary measures for a listed pest where actions are not technically justified in a particular situation or for any other reason.

Specific lists of regulated pests should not include pests for which phytosanitary actions are not required. However, lists of non-regulated pests may be maintained if desired.

6.2 Phytosanitary actions for pests not included on general lists of regulated pests

Certain pests may require phytosanitary actions without being listed as regulated pests. These pests may be previously unknown but are categorized as regulated pests on a preliminary basis because the NPPO has reasonable cause to believe they pose a phytosanitary threat. It is the responsibility of the NPPO that takes action for a pest with this status to be able to provide a sound technical basis. If provisional measures are established, the NPPO should actively pursue additional information and complete a PRA to establish in a timely manner the regulated or non-regulated status of the pest.

In some instances, unlisted pests may require phytosanitary actions because the pest cannot be adequately identified. This may be because the specimen is taxonomically unknown, in poor condition, or the life stage being examined cannot be identified to the required taxonomic level. In such cases, the NPPO of the importing contracting party should have a sound technical basis for the application of phytosanitary actions.

Where pests are routinely found in a form that does not allow for adequate identification (e.g. eggs, early instar larvae, imperfect forms, etc.), and it is decided that such pests require phytosanitary actions, NPPOs should add such pests to the general list of regulated pests and relevant specific lists of regulated pests, noting the identification problem and the basis for requiring actions.

6.3 Phytosanitary actions for pests not included on specific lists of regulated pests

Phytosanitary actions may be applied for pests that are not included in a specific list of regulated pests. Although regulated, these pests may not have been listed because they were not anticipated for the origin, commodity, or circumstances for which the list was developed. Such pests should be included on the appropriate specific lists when it is determined that the occurrence of the pest in the same and similar circumstances may be anticipated in the future.

SPECIFIC REQUIREMENTS

1. Categories and criteria for listing regulated pests

1.1 Categories of regulated pests

Regulated pests may be categorized according to the defining criteria for quarantine and regulated non-quarantine pests:

- Quarantine pest, not present (in the territories of the importing contracting party);
- Quarantine pest, present but not widely distributed and under official control;
- Regulated non-quarantine pest.

1.2 Criteria for listing

Pests are added or removed from lists of regulated pests based on specific criteria. These criteria correspond to the provisions of the IPPC requiring that:

- pests meet the defining criteria for quarantine or regulated non-quarantine pests to be regulated, (Article II – Regulated pest);
- only regulated pests are eligible for phytosanitary measures, (Article VI.2);
- phytosanitary measures are technically justified, (Article VI.1b);
- and PRA provides the basis for technical justification, (Article II – Technically justified).

A list of regulated pests that meet the defining criteria for regulated pests only identifies pests for which phytosanitary measures may be applied. PRA is required to determine that measures are necessary and the strength of measures to be applied. Therefore, a list of regulated pests may include pests for which measures are not required in all circumstances.

Pests that are listed in established legislation or requirements should be reflected in a list of regulated pests and in relevant specific lists of regulated pests.

2. Procedures for establishing lists of regulated pests

Lists of regulated pests are established by the NPPO of the importing contracting party based on the criteria described above. Procedures involve listing pests with certain essential accompanying information.

2.1 Minimum information

The minimum of information to be associated with a list of regulated pests includes:

Name of pest – The scientific name of the pest is used for listing purposes. To the extent possible, the pest should be identified as a distinct taxonomic entity. The taxonomic unit for the pest is generally a species. The use of a higher or lower taxonomic level should be supported by scientifically sound rationale and, in the case of levels below the species, by evidence demonstrating that factors such as differences in virulence or susceptibility are significant enough to justify making the distinction. In cases where a vector is involved, the vector may also be considered a pest to the extent that it is associated with the causal organism and is required for transmission of the

pest. Where pests cannot be adequately identified, there should be a technically sound rationale to support considering the pest(s) regulated.

The scientific name of the pest is used for listing purposes. The scientific name should be complemented by a common term for the relevant taxonomic group (e.g. insect, mollusk, virus, fungus, nematode, etc.).

Pest category – Quarantine pest, not present; quarantine pest, present but not widely distributed and under official control; or regulated non-quarantine pest (see 1.1 above).

Association with regulated article(s) – Host commodities or other articles that are regulated for the listed pest(s) or which may be pathways for pest introduction are identified.

Level of specificity – The taxonomic level which is the level for the application of measures is specifically identified.

Where codes are used for any of the above, the NPPO responsible for the list should also make available appropriate information for its proper understanding and use.

2.2 Supplementary information

Information that may be provided where appropriate includes:

- Synonyms;
- Reference to pertinent legislation, regulations, or requirements;
- Reference to a pest data sheet or PRA;
- Reference to categorization or other provisional information;
- Reference to a record of changes in the status of the pest and the rationale for changes

2.3 Sources of information

The NPPO is responsible for procedures to establish general lists of regulated pests and to produce specific lists of regulated pests. However, information used for necessary PRA and subsequent listing may come from various sources within or outside the NPPO including other agencies of the contracting party, other NPPOs (in particular where the NPPO of the exporting contracting party requests specific lists for certification purposes), regional plant protection organizations, scientific academia, scientific researchers, and other sources.

3. Maintaining lists of regulated pests

The NPPO is responsible for maintaining pest lists. This involves updating lists and appropriate record keeping.

Lists of regulated pests require updating when new pests are added or the status of listed pests changes, or when information is added or changed for listed pests. The following are some of the more common reasons for updating these lists:

- New prohibitions, restrictions or requirements;
- Change in pest status (see ISPM No. 8: *Determination of pest status in an area*);
- PRA;
- Change in taxonomy

The updating of pest lists should be done as soon as the need for modifications is identified. Formal changes in legal instruments, where appropriate, should follow as quickly as possible.

It is desirable for NPPOs to keep appropriate records of changes in pest lists over time, (e.g. rationale for change, date of change) for reference and to facilitate response to inquiries that may be related to disputes.

4. Distribution and communication of lists of regulated pests

Lists of regulated pests are established and maintained by the NPPO. Lists may be included in legislation, regulations, requirements or administrative decisions. Contracting parties should create operational mechanisms for establishing, maintaining and distributing lists in a responsive manner.

The IPPC makes provision for the official distribution of lists and languages to be used.

4.1 Official distribution

The IPPC requires that contracting parties make lists of regulated pests available to the IPPC Secretariat and regional plant protection organizations to which they are members. They are further obliged to provide such lists to other NPPOs upon request (Article VII.2j).

Official lists of regulated pests may be made available to the IPPC Secretariat in written or electronic form, or by indicating to the IPPC Secretariat where such information is publicly available (e.g. on the Internet). Pest lists may be provided by the IPPC Secretariat to NPPOs for information purposes, but are not official. Pest lists may also be provided by the IPPC Secretariat to other organizations or individuals only after first consulting with the NPPO responsible for the list.

The means for making pest lists available to regional plant protection organizations is decided within the organization.

4.2 Requests for lists of regulated pests

NPPOs may request general lists of regulated pests or specific lists of regulated pests from other NPPOs.

Requests may be for:

- Clarification of the regulatory status for particular pests;
- Specification of quarantine pests for certification purposes;
- Regulated pests for particular commodities;
- Information concerning regulated pests not associated with any particular commodity;
- Updating of previously provided pest list(s).

In general, requests should be as specific as possible to the pests, commodities, and circumstances of concern to the contracting party. Requesting or providing a complete list of all regulated pests should be avoided as it may involve considerable effort and provide much more information than is needed. Copies of regulations may be provided where pest lists included in these regulations are considered adequate.

Pest lists should be provided by NPPOs in a timely manner, with highest priority given to requests for lists necessary for phytosanitary certification or to facilitate the movement of commodities in trade.

Both requests and responses for pest lists should be through official contact points.

4.3 Form and language

Lists of regulated pests established and maintained by the NPPO may be in the language preferred by the contracting party responsible for the list. Lists of regulated pests made available to the IPPC Secretariat, and in response to requests from other NPPOs should be provided in one of the five official languages of FAO (required under Article XIX.3c of the IPPC).

Pest lists may be provided electronically or by access to an appropriately structured Internet website where NPPOs have indicated this is possible and the corresponding organization (IPPC Secretariat, RPPO, or NPPO) have the capability for such access and have indicated willingness to use this form of transmittal.

**INTERIM STANDARDS COMMITTEE
FIRST MEETING**

Rome: 15 to 19 May 2000

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