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# **INTERNATIONAL STANDARDS FOR PHYTOSANITARY MEASURES**

## ***REQUIREMENTS FOR THE ESTABLISHMENT OF PEST FREE AREAS***



Secretariat of the International Plant Protection Convention  
Food and Agriculture Organization  
of the United Nations  
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***Endorsement***

International standards for phytosanitary measures are prepared by the Secretariat of the International Plant Protection Convention as part of the United Nations Food and Agriculture Organization's global programme of policy and technical assistance in plant quarantine. This programme makes available to FAO Members and other interested parties these standards, guidelines and recommendations to achieve international harmonization of phytosanitary measures, with the aim to facilitate trade and avoid the use of unjustifiable measures as barriers to trade.

The following standard was endorsed by the 28th Session of the FAO Conference in November 1995.

Jacques Diouf  
Director-General  
Food and Agriculture Organization of the United Nations

***Review and amendment***

International standards for phytosanitary measures are subject to periodic review and amendment. The next review date for this standard is 2001, or such other date as may be agreed upon by the Commission on Phytosanitary Measures.

Standards will be updated and republished as necessary. Standard holders should ensure that the current edition of this standard is being used.

***Distribution***

International standards for phytosanitary measures are distributed by the Secretariat of the International Plant Protection Convention to all FAO Members, plus the Executive/Technical Secretariats of the Regional Plant Protection Organizations:

- Asia and Pacific Plant Protection Commission
- Caribbean Plant Protection Commission
- Comité Regional de Sanidad Vegetal para el Cono Sur
- Comunidad Andina
- European and Mediterranean Plant Protection Organization
- Inter-African Phytosanitary Council
- North American Plant Protection Organization
- Organismo Internacional Regional de Sanidad Agropecuaria
- Pacific Plant Protection Organization.

## INTRODUCTION

### SCOPE

This standard describes the requirements for the establishment and use of pest free areas (PFAs) as a risk management option for phytosanitary certification of plants and plant products and other regulated articles exported from the PFA or to support the scientific justification for phytosanitary measures taken by an importing country for protection of an endangered PFA.

### 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.<sup>1</sup>
- 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.
- Principles of plant quarantine as related to international trade*, 1995. ISPM Pub. No. 1, FAO, Rome.

### DEFINITIONS AND ABBREVIATIONS

Area	An officially defined country, part of a country or all or parts of several countries.
Delimiting survey	Survey conducted to establish the boundaries of an area considered to be infested by or free from a pest.
Detection survey	Survey conducted in an area to determine if pests are present.
IPPC	International Plant Protection Convention as deposited in 1951 with FAO in Rome and as subsequently amended.
Monitoring survey	Ongoing survey to verify the characteristics of a pest population.
National Plant Protection Organization (NPPO)	Official service established by a government to discharge the functions specified by the IPPC.

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<sup>1</sup> The terms and definitions published in 1996 in this standard conform to this edition of the *Glossary of phytosanitary terms*.

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 free area (PFA)	An area in which a specific pest does not occur as demonstrated by scientific evidence and in which, where appropriate, this condition is being officially maintained.
Phytosanitary measure	Any legislation, regulation or official procedure having the purpose to prevent the introduction and/or spread of quarantine pests.
Phytosanitary regulation	Official rule to prevent the introduction and/or spread of quarantine pests, by regulating the production, movement or existence of commodities or other articles, or the normal activity of persons, and by establishing schemes for phytosanitary certification.
Survey	Methodical procedure to determine the characteristics of a pest population or to determine which species occur in an area.

## **OUTLINE OF REQUIREMENTS**

A "pest free area" is: "an area in which a specific pest does not occur as demonstrated by scientific evidence and in which, where appropriate, this condition is being officially maintained".

The establishment and use of a PFA by an NPPO provides for the export of plants, plant products and other regulated articles from the country in which the area is situated (exporting country) to another country (importing country) without the need for application of additional phytosanitary measures when certain requirements are met. Thus, the pest free status of an area may be used as the basis for the phytosanitary certification of plants, plant products and other regulated articles with respect to the stated pest(s). It also provides, as an element in pest risk assessment, the confirmation on a scientific basis of the absence of a stated pest from an area. The PFA is then an element in the justification of phytosanitary measures taken by an importing country to protect an endangered area.

Although the term "pest free areas" encompasses a whole range of types (from an entire country which is pest free to a small area which is pest free but situated in a country where that pest is prevalent), it has been found to be convenient to discuss the requirements of PFAs by defining three types:

- an entire country
- an uninfested part of a country in which a limited infested area is present
- an uninfested part of a country situated within a generally infested area.

In each of these cases, the PFA may, as appropriate, concern all or part of several countries.

Three main components or stages are considered in the establishment and subsequent maintenance of a PFA:

- systems to establish freedom
- phytosanitary measures to maintain freedom
- checks to verify freedom has been maintained.

The nature of these components will vary according to the biology of the pest, the types and characteristics of the PFA and the level of phytosanitary security required, as based on pest risk analysis. The methods used to achieve these components may include:

- data assembly
- surveys (delimiting, detection, monitoring)
- regulatory controls
- audit (review and evaluation)
- documentation (reports, work plans).

## 1. GENERAL REQUIREMENTS FOR PEST FREE AREAS (PFAs)

### 1.1 Determination of a PFA

The delimitation of a PFA should be relevant to the biology of the pest concerned. This will affect the scale at which it is possible to define a PFA and the types of boundaries by which it can be delimited. In principle, PFAs should be delimited in close relation with the occurrence of the pest. In practice, however, PFAs are generally delimited by readily recognizable boundaries, considered to coincide acceptably with a pest's biological limits. These may be administrative (e.g. country, province or commune borders), physical features (e.g. rivers, seas, mountain ranges, roads) or property boundaries which are clear to all parties. For various practical reasons, it may also be decided to establish a PFA inside an area considered to be pest free, and thus avoid the necessity for exact delimitation of the true limits of the PFA.

### 1.2 Establishment and Maintenance of a PFA

There are three main components in establishing and maintaining a PFA. These are:

- systems to establish freedom
- phytosanitary measures to maintain freedom
- checks to verify freedom has been maintained.

The nature of these components will vary according to the:

- biology of the pest including:
  - its survival potential
  - its rate of reproduction
  - its means of dispersal
  - the availability of host plants etc
- relevant PFA characteristics including its:
  - size
  - degree of isolation
  - ecological conditions
  - homogeneity etc
- level of phytosanitary security required as related to the assessed level of risk, according to the pest risk analysis conducted.

The international standards for phytosanitary measures: *Guidelines for surveillance* and *Guidelines for pest risk analysis*, provide further details on general surveillance and specific survey requirements.

### **1.2.1 Systems to establish freedom**

Two general types of systems to provide data are recognized, though variations on, or combinations of the two can be used. These are:

- general surveillance
- specific surveys.

#### **General surveillance**

This involves utilizing all sources of data such as NPPOs, other national and local government agencies, research institutions, universities, scientific societies (including amateur specialists), producers, consultants, museums and the general public. Information may be obtained from:

- scientific and trade journals
- unpublished historical data
- contemporary observations.

#### **Specific surveys**

These may be detection or delimiting surveys. They are official surveys and should follow a plan which is approved by the NPPO concerned.

### **1.2.2 Phytosanitary measures to maintain freedom**

Specific measures can be used to prevent the introduction and spread of a pest including:

- regulatory action such as the:
  - listing of a pest on a quarantine pest list
  - specification of import requirements into a country or area
  - restriction of the movement of certain products within areas of a country or countries including buffer zones
- routine monitoring
- extension advice to producers.

The application of phytosanitary measures to maintain pest freedom status is only justified in a PFA, or any portion of a PFA, in which ecological conditions are suitable for the pest to establish.

### **1.2.3 Checks to verify freedom has been maintained**

In order to be able to verify the pest free status of a PFA and for purposes of internal management, the continuing pest free status should be checked after the PFA has been established and phytosanitary measures for maintenance have been put in place. The strength of the checking systems used should be related to the phytosanitary security required. These checks may include:

- *ad hoc* inspection of exported consignments
- requirement that researchers, advisers or inspectors notify the NPPO of any occurrences of the pest
- monitoring surveys.

### **1.3 Documentation and Review**

The establishment and maintenance of a PFA should be adequately documented and periodically reviewed.

Whatever the type of PFA, documentation should be available, as appropriate, on the:

- data assembled to establish the PFA
- various administrative measures taken in support of the PFA
- delimitation of the PFA
- phytosanitary regulations applied
- technical details of surveillance, or survey and monitoring systems used.

It may be useful for an NPPO to send documentation about a PFA to a central information service (FAO or a Regional Plant Protection Organization), with all relevant details, so that the information can be communicated to all interested NPPOs at their request.

When a PFA requires complex measures for its establishment and maintenance to provide a high degree of phytosanitary security, an operational plan based on a bilateral agreement may be needed. Such a plan would list the specific details of activities required in the operation of the PFA including the role and responsibilities of the producers and traders of the country where the PFA is situated. The activities would be reviewed and evaluated regularly and the results could form part of the plan.

## **2. SPECIFIC REQUIREMENTS OF DIFFERENT TYPES OF PFA**

The term "pest free area" encompasses the spectrum of all types of PFA. For convenience, the requirements of PFAs are discussed by dividing them into three arbitrary types of pest free areas:

- an entire country
- an uninfested part of a country in which a limited infested area is present
- an uninfested part of a country situated within a generally infested area.

In each of these cases, the PFA may, as appropriate, concern all or part of several countries. The specific requirements for the three types of pest free areas are discussed below.

### **2.1 Entire Country**

In this instance, entire country freedom for a specific pest applies to a political entity for which an NPPO has responsibility.

Requirements may include:

#### **2.1.1 Systems to establish freedom**

Both data from general surveillance and from specific surveys are acceptable. They are different in that they may provide for different kinds or degrees of phytosanitary security.

#### **2.1.2 Phytosanitary measures to maintain freedom**

These may include those listed in section 1.2.2.

#### **2.1.3 Checks to verify freedom has been maintained**

These may include those listed in section 1.2.3.

#### **2.1.4 Documentation and review**

These may include those items listed in section 1.3.

### **2.2 Uninfested Part of a Country in Which a Limited Infested Area is Present**

In this instance, the distribution of the pest is limited to part of a country as determined by the NPPO. Official controls are applied to contain a pest population. The PFA may be all or part of the uninfested area.

Requirements may include:

#### **2.2.1 Systems to establish freedom**

Normally PFA status is based on verification from specific surveys. An official delimiting survey may be used to determine the extent of the infestation and, in addition, an official detection survey may be required in the uninfested area to verify absence of the pest.

General surveillance (see 2.1.1 above) may also, if appropriate, be applied to the uninfested part of a country in which a limited infested area is present.

**2.2.2 Phytosanitary measures to maintain freedom**

These may include those listed in section 1.2.2. With this type of PFA, phytosanitary regulations may also be required on the movement of commodities out of the infested area to the uninfested area to prevent spread of the pest as noted in 1.2.2.

**2.2.3 Checks to verify freedom has been maintained**

These may include those listed in section 1.2.3. Monitoring surveys are of more significance in this type of PFA than for that involving an entire country.

**2.2.4 Documentation and review**

Documentation may include supporting evidence describing official controls such as survey results, phytosanitary regulations and information on the NPPO as noted in section 1.3.

**2.3 Uninfested Part of a Country Situated Within a Generally Infested Area**

This type of PFA is an area, within a generally infested area, which has been made (or shown to be) free from a specific pest. It is maintained pest free so that an exporting country can use this status as a basis for phytosanitary certification of plants and/or plant products.

In certain cases, a PFA may be established within an area whose infestation status has not been based on specific surveys.

The PFA should be adequately isolated in relation to the biology of the pest.

Requirements should include:

**2.3.1 Systems to establish freedom**

Delimiting and detection surveys would be required for this type of PFA.

**2.3.2 Phytosanitary measures to maintain freedom**

These may include those listed in section 1.2.2. With this type of PFA, phytosanitary regulations may also be required on the movement of host material out of the infested area to the uninfested area to prevent spread of the pest as noted in 1.2.2.

**2.3.3 Checks to verify freedom has been maintained**

These may include those listed in section 1.2.3. Ongoing monitoring surveys are a likely requirement with this type of PFA.

**2.3.4 Documentation and review**

Documentation may include supporting evidence describing official controls such as survey results, phytosanitary regulations and information on the NPPO as noted in section 1.3. As this type of PFA is likely to involve an agreement between trade partners, its implementation would need to be reviewed and evaluated by the NPPO of the importing country.

*For further information on international standards, guidelines and recommendations concerning phytosanitary measures, and the complete list of current publications, please contact the:*

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