

**Phytosanitary procedures**  
**Procédures phytosanitaires**

## **Elements common to inspection of places of production, area-wide surveillance, inspection of consignments and lot identification**

### **Specific scope**

This standard is intended for use in association with the EPPO Standards series PM 3 on phytosanitary procedures for consignment inspection, inspection of places of production and area-wide surveillance. It includes elements common to inspection of consignments, places of production and area-wide surveillance, and lot identification.

### **Specific approval and amendment**

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### **Introduction**

Since 2003, EPPO has established a work programme for developing phytosanitary standards for inspection of places of production and area-wide surveillance, and inspection of consignments. Such standards are consignment/crop or pest specific. When developing these standards it was considered appropriate to have a standard including general elements common to all of these types of inspection and also to give general guidance on lot identification. This document could then be referenced in each specific standard, so that only specific guidance for inspection of commodities/crops, for specific pests or on lot identification for specific commodities would appear in specific standards. Specific standards give practical guidance to inspectors on how to carry out their inspections.

### **General elements on phytosanitary inspection**

In ISPM no. 5 Glossary of phytosanitary terms (FAO, 2009), inspection is defined as ‘Official visual examination of plants, plant products or other regulated articles to determine if pests are present and/or to determine compliance with phytosanitary regulation’.

Inspection procedures may also include the collection of samples for laboratory testing or for the verification of pests. For pests that are not visually detectable, the inspection procedure may consist only of lot identification and sampling for laboratory testing or destructive sampling to detect pests.

The use of inspection as a means to detect pests on host plants in places of production or in the vicinity or to determine or verify the pest level of a consignment is based on the following assumptions:

- the pests of concern are visually detectable
- the inspection is operationally practical and
- some probability of pests being undetected is recognized.

Inspection may also be carried out generally for the detection of organisms, which are not yet regulated as pests but which could be potential pests.

As it is often not feasible to inspect an entire place of production, its vicinity and wider areas or to inspect an entire consignment, phytosanitary inspection is often based on sampling (e.g. only a proportion of plants in the place of production or consignment is inspected).

One should be aware that there is some probability of pests remaining undetected when inspection is used. This is because inspection may not be 100% effective for detecting a specified pest on the plants or samples examined and because inspection is usually based on sampling, which may not involve visual examination of 100% of the plants on the places of production or area or consignment.

Inspection can be used as a risk management procedure.

### **Elements common to inspections of places of production and for area-wide surveillance**

Inspection of plants is a common component of the phytosanitary procedures used to detect the presence of a plant pest in places of

production. It is often also necessary to inspect plants in the vicinity of the place of production and in wider areas. Inspection of places of production is an essential tool for management of pest risks. It is used both before the export of consignments of plants, plant products or other regulated articles produced on, and/or moved from, a place of production or for post-import inspection of imported consignments (i.e. the inspection of plants after a certain period following their import).

Inspection of host plants for specific pests is also a common procedure for the establishment and maintenance of a pest free area or pest free places of production. *Requirements for the establishment of pest-free areas* are presented in ISPM no. 4 (FAO, 1995) and *requirements for the establishment of pest free places of production and pest free production sites* in ISPM no. 10 (FAO, 1999).

An inspection of a place of production (and a buffer zone when appropriate) prior to export is used to ensure that the commodity exported from the place of production meets specified phytosanitary requirements of the importing country at the time of inspection. Inspection of the place of production may be required to be done in association with a consignment inspection before a phytosanitary certificate is issued for the commodity.

Post-import inspection at a place of production is used to verify compliance with phytosanitary import requirements.

The aim of a place of production inspection is to maximize the probability of finding the pest. To do this, and depending on the biology of the pest, inspection may target specific parts of the place of production. Trapping may also be included in the inspection procedure. Inspection may be used as a phytosanitary measure.

More detailed guidance on inspection procedures is given in each specific commodity standard for inspection.

## General elements for the inspection of consignments

Inspection of consignments of plant and plant products moving in trade is an essential tool for management of pest risks and is the most frequently used phytosanitary procedure worldwide, both for import and for export. The objective of inspection of consignments is to confirm compliance with import or export requirements relating to quarantine pests or regulated non-quarantine pests. It often serves to verify the efficacy of other phytosanitary measures taken at a previous stage. Inspection is also a common procedure for verification of compliance of consignments with specific phytosanitary requirements (e.g. freedom from soil, packaging requirements, dormancy).

Article V of the New Revised Text of the IPPC (FAO, 1997) states that each contracting party shall make arrangements for phytosanitary certification, with the objective of ensuring that exported plants and plant products and other regulated articles are in conformity with the certifying statements of the phytosanitary certificate. The certifying statements in the models set out in the annex of the New Revised Text of the IPPC are:

For the phytosanitary certificate ‘This is to certify that the plants, plant products or other regulated articles described herein

have been inspected and/or tested according to appropriate official procedures and are 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, including those for regulated non-quarantine pests’.

For the phytosanitary certificate for re-export: ‘This is to certify that the plants, plant products or other regulated articles are considered to conform with the current phytosanitary requirements of the importing contracting party, and that during storage the consignment has not been subjected to the risk of infestation or infection’.

From these statements it can be concluded that it is the responsibility of the exporting country (where appropriate the country of re-export) to ensure that the plants, plant products or other regulated articles comply with the phytosanitary requirements of the importing country before issuance of a phytosanitary certificate (see also ISPM no. 7 Export Certification System, FAO, 1997). Import inspection is then a control procedure performed by the importing country to verify the compliance of the consignment with the appropriate phytosanitary requirements. For quarantine pests, it is important to maximize the chance of detection by targeting inspection wherever possible at those plants or units which are most likely to be carrying the organism (e.g. most susceptible varieties, plants from specific origins, plants from origins or producers associated with previous instances of non compliance). This is often based on the experience of the inspector, information from the NPPO or notification by other countries. Phytosanitary inspection of imported consignments may be carried out at reduced frequency if experience gained from earlier introductions of plants, plant products or other articles of the same origin indicates that the articles in the consignment or lot are likely to comply with the phytosanitary import requirements of the country concerned. A pre-export inspection is used to ensure that the consignment meets specified phytosanitary requirements of the importing country at the time of inspection.

An inspection may lead to actions such as:

- refusal to issue a phytosanitary certificate for a consignment (or part of a consignment) intended to be exported
- refusal of entry, detention, treatment, destruction or removal from the territory of the importing country for a consignment (or part of a consignment) at import.

Thus the inspection procedure, including the collecting and examination of the sample(s), should aim to assure a consistent level of efficacy and it is important that the inspection methodology (including the sampling procedures) used by NPPOs should be documented and transparent. Procedures for the inspection of consignments of plants, plant products and other regulated articles at import and export are described in ISPM no. 23 *Guidelines for inspection* (FAO, 2005).

ISPM no. 31 *Methodologies for sampling of consignments* (FAO, 2008) provides guidance to NPPOs in selecting appropriate sampling methodology for inspection or testing to verify compliance with phytosanitary requirements. The above ISPM standards are available on the International Phytosanitary Portal (<https://www.ippc.int>).

As explained in ISPM no. 31, certain parameters should be determined by the NPPO when applying statistically-based sampling. Among these parameters are the level of confidence and the level of detection. Levels of confidence are commonly fixed at 99% for plants for planting and between 80% and 95% for fruits and vegetables or cut flowers (further guidance is provided in specific commodity procedures). Commonly used levels of infection to be detected are between 0.1% and 10% depending mainly on the commodity and its intended use. Lower values are commonly fixed for plants for planting (usually less than 1%), than for fruits and vegetables for consumption (between 5% and 10%).

Additional guidance on inspection procedures is given in each specific commodity standard for inspection.

### General elements for lot identification

Export inspection, as well as import inspection, often refers to consignments. As defined in ISPM no. 7 Glossary of phytosanitary terms, a consignment is '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 commodities or lots)'. A lot is defined as 'a number of units of a single commodity, identifiable by its homogeneity of composition, origin etc., forming part of a consignment'. Where consignments are composed of lots, the phytosanitary inspection should be performed on the basis of identifiable lots, not consignments, and

the criteria used to distinguish lots should be consistent for similar consignments.

Species are the primary criteria for lot identification. ISPM no. 12 *Guidelines for phytosanitary certificates* includes the provision that information inserted on the phytosanitary certificate under the heading botanical names of plants should identify plants and plant products using accepted scientific names, at least to genus level but preferably to species level (when requirements concern species, the species names should be mentioned on the certificate).

Other examples of criteria which may be used to identify the lots are:

- varieties or cultivars. Several varieties of the same commodity may be present in the same consignment. These varieties may not be mentioned on the phytosanitary certificate (as it is often not a requirement). However, they are usually included in the invoice or indicated on the boxes. As varieties may show different susceptibility to pests, inspection should target the most susceptible varieties, when this is known
- marks on boxes, bags or plants. These may give an indication if the plants or plant products have been produced at the same place of production (labels on plants or boxes may indicate producer numbers, packing station number)
- stages and size of plants. Different stages of plants of the same commodity may be mixed in a consignment.

Specific guidance on lot identification is given in each commodity standard for inspection.