



Transit

Phytosanitary issues of consignments
in transit: a guide for national plant
protection organizations



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This paper presents a guide to phytosanitary aspects of transit arrangements. It was created as a component of the IPPC National Phytosanitary Capacity Building Strategy, which was adopted by the fifth session Commission on Phytosanitary Measures (2010) of the International Plant Protection Convention. This paper was drafted by Jeff Jones and reviewed by the IPPC Capacity Development Committee (including phytosanitary experts from the seven FAO regions), the Technical Consultation among Regional Plant Protection Organizations, and experts involved in the development of *ISPM 25:2006 (Consignments in transit)*. It is consistent with the agreed definition of National Phytosanitary Capacity and the CPM-adopted strategy.

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Acronyms

CPM	Commission on Phytosanitary Measures
FAO	Food and Agriculture Organization of the United Nations
IPPC	International Plant Protection Convention
ISPM	International Standard for Phytosanitary Measures
NPPO	National Plant Protection Organization

Definitions¹

Biological control agent: A **natural enemy**, antagonist or **competitor**, or other **organism**, used for **pest control** [ISPM 3:1995; revised ISPM 3:2005]

Commodity: A type of **plant**, **plant product**, or other article being moved for trade or other purpose [FAO, 1990; revised ICPM, 2001]

Consignment: A quantity of **plants**, **plant products** 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**) [FAO, 1990; revised ICPM, 2001]

Consignment in transit: A **consignment** which passes through a country without being imported, and that may be subject to **phytosanitary measures** [FAO, 1990; revised CEPM, 1996; CEPM 1999; ICPM, 2002; ISPM 25:2006; formerly country of transit]

Contaminating pest: A **pest** that is carried by a **commodity** and, in the case of **plants** and **plant products**, does not infest those **plants** or **plant products** [CEPM, 1996; revised CEPM, 1999]

Emergency action: A prompt **phytosanitary action** undertaken in a new or unexpected phytosanitary situation [ICPM, 2001]

Emergency measure: A **phytosanitary measure** established as a matter of urgency in a new or unexpected phytosanitary situation. An emergency measure may or may not be a **provisional measure** [ICPM, 2001; revised ICPM, 2005]

Entry (of a consignment): Movement through a **point of entry** into an **area** [FAO, 1995]

Entry (of a pest): Movement of a **pest** into an **area** where it is not yet present, or present but not widely distributed and being **officially controlled** [FAO, 1995]

Establishment (of a pest): Perpetuation, for the foreseeable future, of a **pest** within an **area** after **entry** [FAO, 1990; revised FAO, 1995; IPPC, 1997; formerly established]

Infestation (of a commodity): Presence in a **commodity** of a living **pest** of the **plant** or **plant product** concerned. **Infestation** includes infection [CEPM, 1997; revised CEPM, 1999]

Inspection: **Official visual examination** of **plants**, **plant products** or other **regulated articles** to determine if **pests** are present or to determine compliance with **phytosanitary regulations** [FAO, 1990; revised FAO, 1995; formerly inspect]

Integrity (of a consignment): Composition of a **consignment** as described by its **phytosanitary certificate** or other **officially acceptable** document, maintained without loss, addition or substitution [CPM, 2007]

Intended use: Declared purpose for which **plants**, **plant products** or other articles are imported, produced or used [ISPM 16:2002; revised CPM, 2009]

¹ / This list includes only the glossary terms that are used in this guide. The definitions are sourced from the IPPC [Glossary of phytosanitary terms](https://www.ippc.int/publications/glossary-phytosanitary-terms) (ISPM 5). The glossary is updated annually based on decisions taken by the IPPC Commission on Phytosanitary Measures. The complete and updated glossary is maintained at: <https://www.ippc.int/publications/glossary-phytosanitary-terms>. The definitions listed here are accurate as of February 2014.

International Plant Protection Convention: International Plant Protection Convention, as deposited with FAO in Rome in 1951 and as subsequently amended [FAO, 1990]

International Standard for Phytosanitary Measures: An **international standard** adopted by the Conference of FAO, the Interim Commission on Phytosanitary Measures or the Commission on Phytosanitary Measures, established under the IPPC [CEPM, 1996; revised CEPM, 1999]

Introduction (of a pest): The **entry** of a **pest** resulting in its **establishment** [FAO, 1990; revised FAO, 1995; IPPC, 1997]

IPPC: International Plant Protection Convention, as deposited in 1951 with FAO in Rome and as subsequently amended [FAO, 1990; revised ICPM, 2001]

ISPM: International Standard for Phytosanitary Measures [CEPM, 1996; revised ICPM, 2001]

National plant protection organization: Official service established by a government to discharge the functions specified by the IPPC [FAO, 1990; formerly plant protection organization (national)]

NPPO: National plant protection organization [FAO, 1990; ICPM, 2001]

Packaging: Material used in supporting, protecting or carrying a **commodity** [ISPM 20:2004]

Pathway: Any means that allows the entry or **spread** of a **pest** [FAO, 1990; revised FAO, 1995]

Pest: Any species, strain or biotype of plant, animal or **pathogenic** agent injurious to **plants** or **plant products**. Note: In the IPPC, plant pest is sometimes used for the term pest [FAO, 1990; revised FAO, 1995; IPPC, 1997; revised CPM, 2012]

Pest risk (for quarantine pests): The probability of **introduction** and **spread** of a **pest** and the magnitude of the associated potential economic consequences [ISPM 2:2007]

Pest risk analysis (agreed interpretation): The process of evaluating biological or other scientific and economic evidence to determine whether an **organism** is a **pest**, whether it should be regulated, and the strength of any **phytosanitary measures** to be taken against it [FAO, 1995; revised IPPC, 1997; ISPM 2:2007]

Pest risk assessment (for quarantine pests): Evaluation of the probability of the **introduction** and **spread** of a **pest** and the magnitude of the associated potential economic consequences [FAO, 1995; revised ISPM 11:2001; ISPM 2:2007]

Pest risk management (for quarantine pests): Evaluation and selection of options to reduce the risk of **introduction** and **spread** of a **pest** [FAO, 1995; revised ISPM 11:2001]

Phytosanitary certificate: An **official** paper document or its **official** electronic equivalent, consistent with the model certificates of the IPPC, attesting that a **consignment** meets **phytosanitary import requirements** [FAO, 1990; revised CPM, 2012]

Phytosanitary legislation: Basic laws granting legal authority to a **national plant protection organization** from which **phytosanitary regulations** may be drafted [FAO, 1990; revised FAO, 1995]

Phytosanitary measure (agreed interpretation): Any **legislation, regulation** or **official** procedure having the purpose to prevent the **introduction** or **spread** of quarantine **pests**, or to limit the economic impact of **regulated non-quarantine pests** [FAO, 1995; revised IPPC, 1997; ICPM, 2002]

The agreed interpretation of the term phytosanitary measure accounts for the relationship of phytosanitary measures to regulated non-quarantine pests. This relationship is not adequately reflected in the definition found in Article II of the IPPC (1997).

Phytosanitary regulation: Official rule to prevent the **introduction** or **spread** of quarantine **pests**, or to limit the economic impact of **regulated non-quarantine pests**, including establishment of procedures for **phytosanitary certification** [FAO, 1990; revised FAO, 1995; CEPM, 1999; ICPM, 2001]

Phytosanitary security (of a **consignment**): Maintenance of the **integrity** of a **consignment** and prevention of its **infestation** and **contamination** by **regulated pests**, through the application of appropriate **phytosanitary measures** [CPM, 2009]

Plant products: Unmanufactured material of **plant** origin (including **grain**) and those manufactured products that, by their nature or that of their processing, may create a risk for the **introduction** and **spread** of pests [FAO, 1990; revised IPPC, 1997; formerly plant product]

Plants: Living plants and parts thereof, including **seeds** and **germplasm** [FAO, 1990; revised IPPC, 1997]

Plants for planting: **Plants** intended to remain **planted**, to be **planted** or **replanted** [FAO, 1990]

Point of entry: Airport, seaport or land border point **officially** designated for the importation of **consignments**, and/or entrance of passengers [FAO, 1995]

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** [FAO, 1990; revised FAO, 1995; IPPC 1997]

Regulated article: Any **plant**, **plant product**, storage place, **packaging**, conveyance, container, soil and any other **organism**, object or material capable of harbouring or spreading **pests**, deemed to require **phytosanitary measures**, particularly where international transportation is involved [FAO, 1990; revised FAO, 1995; IPPC, 1997]

Regulated pest: A **quarantine pest** or a **regulated non-quarantine pest** [IPPC, 1997]

Restriction: A **phytosanitary regulation** allowing the importation or movement of specified **commodities** subject to specific requirements [CEPM, 1996; revised CEPM, 1999]

Spread (of a **pest**): Expansion of the geographical distribution of a **pest** within an **area** [FAO, 1995]

Standard: Document established by consensus and approved by a recognized body, that provides, for common and repeated use, rules, guidelines or characteristics for activities or their results, aimed at the achievement of the optimum degree of order in a given context [FAO, 1995; ISO/IEC Guide 2:1991 definition]

Technically justified: Justified on the basis of conclusions reached by using an appropriate **pest risk analysis** or, where applicable, another comparable examination and evaluation of available scientific information [IPPC, 1997]

Transit: See **consignment in transit**

Treatment: **Official** procedure for the killing, **inactivation** or removal of **pests**, or for rendering **pests** infertile or for **devitalization** [FAO, 1990, revised FAO, 1995; ISPM 15:2002; ISPM 18:2003; ICPM, 2005]

Wood packaging material: **Wood** or wood products (excluding paper products) used in supporting, protecting or carrying a **commodity** (includes **dunnage**) [ISPM 15:2002]

Purpose of this guide

This guide provides information for national plant protection organizations (NPPOs) on situations of consignments in transit.

It has been developed to provide information to help NPPOs to:

- ◆ identify whether the consignment in transit poses a phytosanitary risk
- ◆ manage the risk appropriately.

This information highlights that management measures should be based on phytosanitary risk. This means that if there is no phytosanitary risk identified,

there is no need for phytosanitary measures to be in place. Practical examples are provided.

Box 1

Question: Should the NPPO of the country of transit always be involved?

Answer: Only if there is a phytosanitary risk.

An international standard on phytosanitary measures (ISPM) has been adopted on transit: [ISPM 25:2006 \(*Consignments in transit*\)](#). The standard describes procedures to identify and manage phytosanitary risks associated with consignments in transit in such a manner that any phytosanitary measures applied in the country of transit are technically justified and necessary to prevent the introduction into or spread of pests within that country (ISPM 25).

The guide refers to ISPM 25:2006 throughout the text and also draws on other related ISPMs. This guide is provided for information only to support NPPOs to implement ISPM 25:2006.

1 What is transit?

Transit is when a consignment passes through a country (or countries) without being imported. In the context of the International Plant Protection Convention, a "consignment in transit" refers to "a consignment which passes through a country without being imported, and that may be subject to phytosanitary measures."

This means that the consignment passes through one or more intermediate countries before arriving

in the country of import.

"Transit" is not an import to the country of transit. However, commodities moving in this way may pose phytosanitary risk to the country of transit.

Typically it is customs and border-control agencies that control these processes. However, customs

might not address the phytosanitary security of the consignment and transit process.

The NPPO role is to:

- ◆ identify whether there is a phytosanitary risk involved
- ◆ assess the risk
- ◆ determine how to manage the risk appropriately based on technical justification.

In some cases transit situations are simple administrative procedures without a need for the NPPO to be involved. In other cases the conditions are complex and there is a role for the NPPO of the transit country. The decision by the NPPO of the transit country to intervene should be based on the need to manage a phytosanitary risk. The assessment of risk associated with any consignment should take into account risk factors outlined in [ISPM 25](#).

In many transit situations, consignments remain enclosed and pose little risk to the country of transit. Because there is little risk, there may not be a need for phytosanitary measures or NPPO involvement. In other cases, there may not be a need for direct NPPO involvement, but development of a contingency plan would be valuable.

In cases in which consignments in transit are split up, repacked and moved overland or transhipped to a port of exit, the NPPO may identify and assess pest risks and manage them appropriately. The NPPO faces the challenge of having adequate certified facilities in which to conduct these activities. The NPPO, as manager of the transit of regulated articles, has the responsibility to maintain the policy support and resources necessary to establish and maintain the required facilities and manage their operation.

Box 2

Definition – *consignment in transit*: a consignment which passes through a country without being imported, and that may be subject to phytosanitary measures (IPPC Glossary of phytosanitary terms).

Figure 1



NPPO roles: The NPPO of the exporting country and NPPO of the importing country agree on phytosanitary measures. The NPPO of the transit country can identify whether the consignment poses a phytosanitary risk and cooperate with the NPPO of the exporting country to manage the risk appropriately based on pest risk analysis.

The establishment of a national system to address consignments in transit should be supported by appropriate legal frameworks and commitment to a high level of cooperation among border agencies. The relationship among these agencies should be fostered based on trust, awareness and capability to deal with responsibilities as defined in the relationship. The procedure outlined in this manual requires that the NPPO take the responsibility for the establishment of an effective national transit system. Such a system needs to have a good documentation system for facilitating timely reviews and improvements to the system.

The movement of plant and plant products in international trade introduces risk of spreading regulated pests. Movement of regulated articles from exporting country directly to importing country allows the NPPOs of both countries to agree on management options based on the pest risk. However,

Box 3

From the IPPC

Convention text:

Contracting parties may apply measures specified in this Article [Requirements in relation to imports] to consignments in transit through their territories only where such measures are technically justified and necessary to prevent the introduction and/or spread of pests. (IPPC Convention text, Article VII.4, Requirements in relation to imports).

there are cases in which a country of transit is also involved in the movement of regulated articles in international trade. Transit is not an import to the country of transit, but commodities moving in this way may pose phytosanitary risk to that country.

Customs (and other border authorities) have their own responsibilities in the management of consignments in transit. The NPPOs are responsible for dealing with the phytosanitary risks. In cases where a consignment poses no phytosanitary risk, transit procedures are purely administrative and are adequately handled by customs agencies without the need for NPPO intervention.

The NPPO of the country of transit can decide:

- ◆ which transit situations require its intervention, based on phytosanitary risk
- ◆ what phytosanitary measures to apply in order to manage this risk.

2 Notification and exchange of information

Information exchange and notification are key components of strategies aimed at minimizing risk to the country of transit of regulated consignments. The NPPOs of exporting and transit countries, as well as the customs and border-control agencies of the country of transit should be involved in information exchange and notification. In addition, the importing country may have pest risk analysis information that would be useful for the transit country and the transit country may request this information.

NPPOs involved in the management of consignments in transit have responsibilities as follows:

- ◆ The NPPO of the exporting country can facilitate the transit country's pest risk analysis by providing information when requested (ISPM 11:2013, ISPM 12:2011, ISPM 25:2006).

This information may include:

- classes of commodities or regulated articles in transit and their country of origin
- means and methods of transport for consignments in transit
- regulated pests associated with the consignments in transit
- host distribution in the country of transit
- knowledge of transit route in the country of transit
- possibilities that pests may escape from consignments
- existing phytosanitary measures for consignments of commodities in transit
- types of packaging
- conditions of transport (refrigeration, modified atmosphere, etc.)
- procedures applied by customs and other relevant services.

- ◆ The NPPO of the country of transit may conduct risk analysis for consignments in transit. In this process the NPPO would take the commodity type and relevant ISPMs into account and identify requirements for the exporting country to meet.
- ◆ The NPPO of the country of transit should communicate with the exporting country the results of the risk analysis (if conducted) as well as the specific requirements to be met.
- ◆ NPPOs of the exporting country and the country of transit should discuss and agree on management options to be applied that protect the country of transit from the risk that has been identified and assessed.
- ◆ In cases of non-compliance, the NPPO of the country of transit should notify or share information with the exporting country of instances of non-compliance and emergency actions taken in line with ISPM 13:2001 (*Guidelines for the notification of non-compliance and emergency action*).
- ◆ It is advisable for the NPPO of the country of transit to establish effective communication and cooperation with its national customs and border-control agencies, and other stakeholders involved in commodities in transit. This will facilitate the NPPO having timely access to information on and access to regulated articles in transit, and to be notified of instances that may require phytosanitary intervention beyond regular customs handling.

Box 4

Question: What should the NPPO of the transit country do if a pest risk is perceived?

Answer: Pest risk assessment. Then if necessary, consider management options. (See ISPMs 2, 11, 25 and other relevant ISPMs.)

3 Risk to the country of transit

The level of NPPO involvement in consignments in transit should be based on the level of pest risk that the consignment poses to the transit country. To determine this risk and manage it appropriately, the NPPO of the country of transit

- ◆ identifies whether there is a pest risk
- ◆ assesses the risk of pest introduction or spread from the consignment in transit
- ◆ manages the risk based on the risk assessment.

The NPPO of the country of transit can collect and review information to identify whether there is a potential pest risk for the consignment in transit. Section 1.1 of ISPM 25 provides suggestions of types of information to review.

If the NPPO of the transit country identifies a potential pest risk and decides that pest risk assessment is needed, other

Box 5

When NPPOs should be involved: "Only those phytosanitary risks which concern regulated pests of the country of transit or those pests that are under emergency action in that country should be considered." (ISPM 25:2006, *Consignments in transit*, Section 1.1).

ISPMs can provide guidance on how to do this analysis.² According to ISPM 25, this assessment should only address pests that are regulated or under emergency action in the country of transit. The ISPMs related to pest risk analysis can be useful in this process. However, the potential economic consequences of regulated

pests should have been evaluated previously and need not be repeated (ISPM 25).

Some examples are provided below to illustrate how existing ISPMs can be used by transit countries to identify, assess and manage risks of regulated pests.

3.1 Factors related to commodities and associated risk

Many factors affect pest risk. The degree and method of processing of a commodity is one factor that affects pest risk and can provide practical information for NPPOs to identify whether there is a potential pest risk.

ISPM 32:2009 (*Categorization of commodities according to their pest risk*) provides guidance to categorize the level of risk that a commodity poses based on:

- ◆ whether the product has been processed
- ◆ the method and degree of processing to which it has been subjected
- ◆ the commodity's intended use and the consequent potential for the introduction and spread of regulated pests.

This categorization provides options to assign levels of pest risk to certain commodities in transit. In general, commodities that are more processed present a lower pest risk. This information can be useful to identify what level of involvement the NPPO should have in the transit process.

The NPPO of the country of transit may request detailed information on methods or degree of processing (such as temperature, exposure time or size of particles) to determine the pest risk category to which the commodity should be assigned, and if

Box 6

Remember: The NPPO of the transit country needs to be involved only if there is a pest risk.

²/ Relevant materials may include ISPM 2:2007 (*Framework for pest risk analysis*), ISPM 11:2013 (*Pest risk analysis for quarantine pests*) and other ISPMs. See <http://phytosanitary.info/prs> for training materials on pest risk analysis, including an e-learning course.

phytosanitary intervention may be required³. [ISPM 32 Appendix 1](#) provides a flow chart to illustrate the process of categorizing commodities according to their pest risk.

Table 1 below shows a summary of categories of commodities based on the method and degree of processing and where appropriate intended use, based on the guidance in [ISPM 32 \(Section 2\)](#).

Table 1. Categories of commodities as described in ISPM 32

Category	Degree of processing	Phytosanitary action
Category 1	processed to the point of not being capable of infested with quarantine pests	<ul style="list-style-type: none"> – phytosanitary measures not required – phytosanitary certificate not required
Category 2	processed but remain capable of being infested with some quarantine pests	<ul style="list-style-type: none"> – pest risk analysis may be required
Category 3	unprocessed and for consumption or processing	<ul style="list-style-type: none"> – pest risk analysis is necessary to identify the pest risks
Category 4	unprocessed, for planting	<ul style="list-style-type: none"> – pest risk analysis is necessary to identify the pest risks – these commodities may have a higher pest risk

The NPPO, after considering risks associated with the commodity in transit should take *no action* if:

- ◆ The consignment in transit poses no potential phytosanitary risk. For example:
 - Pests associated with the commodity are not regulated in the country of transit.
 - The commodity is processed to the extent where no quarantine pests are likely to be associated with the commodity.
- ◆ Consignments in transit pose negligible or no risk. For example:
 - Consignments are safely enclosed and sealed.
 - Pests are regulated by the country of transit but are unlikely to escape from the consignment.
 - Consignments are not unloaded and transit time is relatively short.
 - Customs procedures do not affect the integrity of the consignment in any way.

◆ Where *potential risks are identified* the NPPO should:

- conduct a risk assessment of pests or commodities to identify the necessity and technical justification of any phytosanitary measure
- consider only those phytosanitary risks which concern regulated pests of the country of transit or those pests that are under emergency action in the transit country.

^{3/} [ISPM 25 \(Section 1\)](#) states that the NPPO of the country of transit should collect and review relevant information. [ISPM 32 \(Section 2\)](#) states that exporting countries should provide detailed information on method or degree of processing in order to assist importing countries in determining to which category the commodity should be assigned. Although the transit country is not importing the consignment, this information on processing would be useful and is in line with the type of information that [ISPM 25](#) suggests to collect. The transit country may request this information.

3.2 Assessing pest risk by the country of transit

The NPPO of the country of transit should normally focus only on evaluating the probability of pests being introduced or spread from consignments in transit when assessing the phytosanitary risks associated with the transit pathway (ISPM 25, ISPM 11 Section 2.2). Reliable information on the status of pests in the exporting and transit countries is important in this assessment. Transit countries rely on pest status reports to conduct a pest risk analysis on a pest in the country of origin of the consignments and to establish phytosanitary regulations to prevent the entry, establishment or spread of a pest in their territories (See ISPM 8:1998 (*Determination of pest status in an area*) and ISPM 17:2002 (*Pest reporting*)).

The NPPO should assess risk carefully based on factors including the following:

- ◆ Pathways for introduction or spread of regulated pests from the consignments in transit. For example:
 - Is there direct contact with the transit commodity?
 - Are there weeds in seeds?
 - How good are the packing materials and conveyances?
- ◆ Regulated pests associated with the consignments in transit:
 - What regulated pests may be associated with the consignment in country of origin, and in transit?
 - What mitigation measures were taken in the country of origin or other transit country?
 - Does the biology of the regulated pest raise the possibility of infestation during transit?
- ◆ Dispersal mechanism and mobility of regulated pests:
 - How mobile is the pest?
 - Is the associated pest vectored?
- ◆ Host distribution in the country of transit:
 - Are transit ports close to areas of host populations?
 - How difficult is it for pests to find hosts in the event of pest escape?
- ◆ Means of transport (e.g. truck, rail, airplane, ship):
 - Are trucks, ship cargo holds and rail approved and certified?
 - What level of safety is associated with each transport type?
 - How much time do the consignments spend crossing through the country of transit?
 - Is phytosanitary security of the conveyance ensured (e.g. closed or sealed)?
- ◆ Existence and type of packaging:
 - How safe is the packaging?
 - Is it insect-proof or leak-proof?
 - How high is the level of containment in case of an accident?
 - What is the probability of pest escape during transit?
- ◆ Changes of configuration:
 - Is the consignment to be split, combined or repacked?
 - Under what conditions will these changes take place?
 - Are procedures and facilities approved by the NPPO?
 - Are procedures monitored by the NPPO (if appropriate)?
- ◆ Duration of transit or storage, and storage conditions:
 - How long is the transit time from entry to exit?
 - Are storage conditions adequate to ensure containment of regulated pests?
- ◆ Route taken by the consignment prior to and within the country of transit:
 - What risks might have been associated with the consignment en route to the transit country?
 - Is the transit route close to available hosts?
 - Are the transit routes safe and with low probabilities of accidents and other factors that could be associated with pest escape?
 - Are transit routes the most direct, so that commodities spend least possible time in transit?
 - Is there a reliable tracking system of the route taken?

- ◆ Frequency, volume and season of transit:
 - How often is the commodity transited?
 - What quantities are transited?
 - Does the season of transit coincide with periods of planting or harvesting, or periods when hosts are readily available in the transit country?

3.3 Phytosanitary measures

Based on risk assessment, the NPPO of the transit country may take measures to manage the pest risk. International standards for phytosanitary measures have been adopted by the IPPC Commission on Phytosanitary Measures and are available at <https://www.ippc.int/core-activities/standards-setting/ispm>. ISPM 11:2013 includes details on options risk management.

Based on risk assessment, consignments in transit may be classified by the NPPO into two broad risk management categories:

- 1 Transit requiring no further phytosanitary measures:
 - Customs control alone is adequate.
 - NPPO takes *no* phytosanitary action.
- 2 Transit requiring further phytosanitary measures.

Where specific phytosanitary measures are required beyond customs control, the NPPO may set transit requirements where necessary and take appropriate action regarding any of the following:

- ◆ Consignment identity and phytosanitary integrity:
 - require phytosanitary certificates
 - verify consignment identity or integrity (further details provided in ISPM 23)

Box 7

Phytosanitary measures should only be applied for risks related to regulated pests or pests that are under emergency action in the country of transit (ISPM 25, Section 1.3.2).

- determine phytosanitary treatments (e.g. pre-shipment treatments, treatments when consignment integrity is doubtful)
- specify physical conditions of the consignment (e.g. refrigeration, pest-proof packaging or conveyance preventing spillage)
- use NPPO-specific seals for conveyances or consignment
- determine the type of packaging required.
- ◆ Movement of transit consignments:
 - designate entry and exit points
 - track consignment while in transit
 - establish transit time or season limits based on pest-host considerations in order to minimize risk
 - verify exit of the consignment.
- ◆ Mode of transport and conveyances:
 - specify, where possible, mode of transport and designated transit routes
 - ensure that goods travel in secure vehicles and containers
 - establish specific carrier's emergency management plans.
- ◆ Handling facilities and procedures:
 - regulate the changes of configuration (e.g. combined, split, repacked)
 - use NPPO-prescribed equipment or facilities
 - ensure that customs facilities are adequate and recognized by the NPPO
 - ensure proper documentation in addition to that required by customs
 - inspection of the consignment
 - ensure safe disposal of waste.

Box 8

Phytosanitary measures should be based on risk analysis and technically justified.

3.4 Specific transit situations

Some specific transit situations and suggestions for intervention are summarized below as reference information that may be useful for the NPPO of the country of transit. In cases where it is suggested that

customs procedures are adequate, the NPPO may still be involved in the verification procedure either directly or through customs/border control agencies.

These situations are provided for information only:

3.4.1 Situation 1

Point of entry is the same as the point of exit. No unloading or storage.

- ◆ Conditions:
 - short transit time
 - consignment remained sealed, properly wrapped and not exposed
 - no phytosanitary risk.
- ◆ Actions: Customs procedures only apply.

3.4.2 Situation 2

Point of entry is point of exit. Consignment is off-loaded, stored and repacked for distribution to different destinations.

- ◆ Conditions:
 - transit time may vary
 - facilities and procedures are adequate to protect the integrity of the consignment
 - negligible phytosanitary risk.
- ◆ Actions: NPPO inspector monitoring of the process for protecting the phytosanitary security of the consignment may be required, in addition to customs procedures.

3.4.3 Situation 3

Point of entry is point of exit. Consignment is off loaded, stored, repacked for distribution.

- ◆ Conditions:
 - transit time variable
 - facilities and procedures are *not* adequate to ensure that consignment integrity is maintained
 - may pose some phytosanitary risk.
- ◆ Actions: Phytosanitary measures may be required in addition to customs procedures.

3.4.4 Situation 4

Point of entry is not point of exit. Consignment is transported overland to port of exit from transit country.

- ◆ Conditions:
 - transit time variable
 - consignment remains properly sealed and contained
 - risk of accidents during trucking, railing and other forms of transport.
- ◆ Actions: Phytosanitary measures may be necessary beyond customs procedures and may include conveyance certification, ensuring appropriate packaging, defining transit route, tracking transit consignments and carriers. (Where the consignment is transported in an open manner, the risk is increased and the NPPO may take appropriate phytosanitary measures as outlined in Section 3.3 of this guide.)

3.4.5 Situation 5

Point of entry is not point of exit. Consignment is transhipped to final port of destination with little or no manipulation.

- ◆ Conditions:
 - transit time variable
 - conveyance cleared at port of entry
 - cargo may be cleared at entry or final destination
 - negligible phytosanitary risk.
- ◆ Actions: No NPPO action necessary beyond customs procedures.

3.5 Additional measures

The NPPO may:

- ◆ require that consignments are subject to the same requirements as imports, which may include prohibition, when appropriate phytosanitary measures for consignments in transit are not available or are impossible to apply
- ◆ decide that the consignments should meet import requirements or subject them to other appropriate phytosanitary measures if consignments in transit are stored or repackaged in such a way that they present a phytosanitary risk.

4 Establishment of a transit system

4.1 Coordination with border agencies and private-sector stakeholders

The objective of a transit system is to prevent regulated pests associated with consignments in transit and their conveyances from being introduced into or spread within the country of transit.

Transit systems should be based on a regulatory framework of phytosanitary legislation, regulations and procedures. The transit system is operated by the NPPO, customs and other relevant authorities in cooperation as appropriate, and should ensure that prescribed phytosanitary measures are applied.

A national transit system encourages cooperation, understanding and knowledge among border agencies. The cooperation of border agencies and other relevant personnel for effective phytosanitary control provides a basis for transparency and consistency in procedures, and it boosts confidence and trust among trading partners.

The NPPO has responsibility for establishing the phytosanitary aspects of a national transit system and may consider the steps outlined below:

- ◆ identify, clearly outline and rationalize the issues to be addressed through the establishment of a transit system
- ◆ solicit policy support from the contracting party for establishing a national transit system
- ◆ identify the main stakeholders and actors involved in transit of consignments. These may include:
 - customs
 - ports authority
 - security personnel
 - handlers
 - clearing agents
 - shipping agents
 - transporters

- ◆ identify and understand the role of each stakeholder in relation to the management of consignments in transit:
 - customs agencies' role to manage consignments in transit
 - legal or administrative obligations of customs agencies under national law
 - international treaty obligations which among other things, might require that customs-control measures taken in the country of departure should be accepted by the countries of transit and destination
 - legal arrangements to ensure that phytosanitary inspectors are allowed to access all facilities or areas of concern where regulated articles may be handled or stored
- ◆ determine how the actions of each stakeholder may impinge on the phytosanitary security of consignments in transit. For example:
 - identity checking and verification procedures
 - document checking
 - opening containers, packages, boxes, etc.
 - time of exposure of opened containers or packaging
 - opening and applying seals to containers
 - vehicle approval
 - splitting up, repackaging, etc.
- ◆ establish a legally binding transit system in which all stakeholders are held responsible and in which their obligations are outlined within that system:
 - discuss with stakeholders
 - secure agreement on common goals and actions towards the achievement of those goals
 - agree on legislation, or when appropriate, administrative procedures for all stakeholders

- ◆ train stakeholders for increased awareness of the significance of the application of phytosanitary measures to consignments in transit, as well as maintaining phytosanitary security of consignments
- ◆ in collaboration with ports authorities and customs, review, upgrade and approve facilities for storage and handling of consignments in transit
- ◆ establish appropriate procedures to minimize risk of pest introduction
- ◆ convene timely discussions, monitoring and review of the transit system.

4.2 Documentation

NPPOs that are involved in transit activities should document their transit systems. Suggestions of specific items to document include:

Box 9

The NPPO has responsibility for the phytosanitary aspects of the transit system and establishes and implements phytosanitary measures necessary to manage phytosanitary risks, taking into account the transit procedures of customs (ISPM 25:2006, Section 2).

- ◆ transit activities in which the NPPO is involved
- ◆ phytosanitary requirements
- ◆ restrictions and prohibitions of transit commodities
- ◆ phytosanitary measures applied
- ◆ emergency actions taken, when appropriate
- ◆ description and operation of the transit system itself
- ◆ standard operating procedures, when applicable.

Maintaining a good documentation system:

- ◆ allows for trace-back when required
- ◆ promotes reliability and credibility among trading partners
- ◆ facilitates reviews
- ◆ promotes transparency (information should be made available on request to any contracting party that may be affected by phytosanitary measures and procedures applied).

4.3 Review and adjustments

It may be advisable for the NPPOs that are involved in transit activities to schedule reviews of their transit systems on a regular basis, for example once per year. An internal audit may be sufficient for simple transit systems. Where the transit arrangements are complex, with high volumes of transit commodities moving frequently with identified risks, an independent external review may be appropriate.

The NPPO should have periodic as well as incident reviews when necessary. A review may focus on:

- ◆ the transit system itself – what works well, what needs to be improved or changed
- ◆ types of consignment in transit and associated risks
- ◆ adjustments necessary to improve the system.

5 Response to emergency or non-compliance situations

Non-compliance with transit requirements or emergencies puts the transit country at risk. [ISPM 13](#) details instances of non-compliance and gives guidance to the NPPO for dealing with such situations. The NPPO may put measures in place to deal with non-compliant and emergency situations. These situations may arise from:

- ◆ noncompliance by the exporting country with phytosanitary requirements of the transit country
- ◆ noncompliance by the exporting country with documentary requirements of the transit country
- ◆ a new or unexpected phytosanitary situation in the exporting country, e.g. the presence of an unreported or unknown pest of potential phytosanitary significance
- ◆ accidents in the country of transit that could lead to the unexpected escape of a regulated pest from a consignment moving in transit
- ◆ inherent weakness in the transit system that may jeopardize the phytosanitary security of consignments.

In these situations, it is advisable for the NPPO to:

- ◆ review the various elements of the transit system
- ◆ establish procedures and emergency actions for identified risks
- ◆ develop an emergency action plan for specific regulated pest associated with the commodity
- ◆ involve all relevant border agencies and stakeholders in identifying and managing emergencies

- ◆ ensure that necessary equipment, chemicals and other materials required for the application of emergency measures are readily available
- ◆ prepare a consistent documentation procedure for all agencies involved in the emergency response
- ◆ establish a notification procedure for communicating with the NPPO of the exporting country and, when appropriate, the NPPO of the importing country
- ◆ provide notification promptly once non-compliance or the need for emergency action has been confirmed and phytosanitary actions taken
- ◆ only if necessary, suspend the transit operation. It would be recommended to discuss with the NPPO of the exporting country and resolve issues in which significant cases of non-compliance are repeated ([ISPM 20](#), [ISPM 13](#)). If risks are caused by internal problems in the country of transit's system, then review and improvement of this process would be needed.

6 Special cases

Box 10

Remember: In all cases, phytosanitary measures should be technically justified and based on risk analysis.

The information below provides theoretical examples for information only that NPPOs can consider. At the time of this publication, there are no adopted ISPMs to provide specific guidance on these issues.

For all situations, risk analysis should be the basis of phytosanitary measures.

6.1 Seeds, soil and growing media

Seeds, soil and other non-sterile growing media pose specific phytosanitary risks especially when moving overland in trucks, rail and other forms of transport. Accidents and spillage may occur where, for example, seeds or other regulated articles are spilled from overturned trucks or carriages. This increases the probability of establishment and spread of associated pests, including weeds.

Because accidents are not always preventable, the NPPO may consider options such as to:

- ◆ establish transit requirements that include certification of seeds from pests
- ◆ in collaboration with customs and other border agencies, track and monitor overland transport of seeds
- ◆ ensure safe and appropriate packaging or safely sealed containers for movement of seeds

- ◆ establish the obligation for truckers and drivers to report accidents:
 - where drivers and truckers already have the obligation to report directly to customs, the NPPO may establish that customs report accidents promptly to the NPPO
 - where truckers and drivers have no obligation to report directly to customs, the NPPO may establish they should report directly and promptly to the NPPO
- ◆ develop an emergency action plan for situations regarding overland movement of seeds.

Soil and non-sterile growing media, if associated with planting material or root crops, may pose risks to the transit country, especially if the related consignments are moved overland or repacked and split up, or if carried in an open conveyance. The NPPO of the transit country may consider options such as to:

- ◆ require that growing media accompanying plants for planting be certified as sterile
- ◆ set limits, when appropriate, on the amount of soil accompanying the consignment, such as root crops for which washing is not preferred
- ◆ require that turf or sprigs be properly certified and, when possible, produced in sterile medium.

6.2 Transit of biological control organisms or living pests for scientific research

The IPPC provides for the regulation of biological control agents and other beneficial organisms.

Article VII.1 of the IPPC states:

With the aim of preventing the introduction and/or spread of regulated pests into their territories, contracting parties shall have sovereign authority to regulate, in accordance with applicable international agreements, the entry of plants and plant products and other regulated articles and, to this end, may:

[...]

(c) prohibit or restrict the movement of regulated pests into their territories;

(d) prohibit or restrict the movement of biological control agents and other organisms of phytosanitary concern claimed to be beneficial into their territories.

Section 4.1 of ISPM 20:2004 (*Guidelines for a phytosanitary import regulatory system*) refers to the regulation of pests and biological control agents and ISPM 3:2005 (*Guidelines for the export, shipment, import and release of biological control agents and other beneficial organisms*) also provides guidance.

A biological control agent or other beneficial organism may be a potential pest itself; in some situations, biological control agents and other beneficial organisms may act as a carrier or pathway for plant pests, hyperparasitoids, hyperparasites and entomopathogens. In this sense, biological control agents and other beneficial organisms may be considered to be regulated articles as described in Article VII.1 of the IPPC and ISPM 20:2004.

The NPPO may:

- ◆ gather and access complete information on biological control agents transiting through its territory
- ◆ determine the associated risks and their management
- ◆ establish requirements for such consignments in transit
- ◆ ensure compliance with transit requirements and conditions
- ◆ ensure proper handling and dispatch conditions with due regard to the nature of the biological control agent
- ◆ facilitate expeditious movement in the country of transit
- ◆ take no phytosanitary measures unless a specific risk has been identified
- ◆ identify and collaborate with an appropriate competent organization or person in the country of transit in the event of emergencies, or when specific handling conditions and facilities are required.

6.3 Aquatic plants

The volume of aquatic plants moving in international trade continues to grow for purposes of – among other things – ecosystems manipulation, food, water gardens and aquaria industries (Standards and Trade Development Facility (STDF), 2013). Both freshwater and marine plants and algae form a critical habitat for other aquatic organisms, a substrate for attached plants and animals, spawning areas for animals, nursery areas for young fish and other biota, and habitat for adult life stages (Wersal & Madsen, 2012).

The water garden and aquarium industries are major pathways for the introduction of invasive plants and plant pests. The NPPO of the country of transit may take appropriate measures to mitigate the phytosanitary risks posed by aquatic plant species moving through its territory if a risk assessment demonstrates that transit of aquatic plants provides particular risks in that country of transit.

The NPPO may consider the following actions regarding consignments of aquatic plants in transit:

- ◆ for each country of origin of a consignment, determine the associated pest species and, where appropriate, conduct a risk analysis to provide the basis for establishing requirements for consignments of aquatic plants in transit
- ◆ ensure compliance with transit requirements and conditions
- ◆ procure relevant information from databanks of NPPOs and other reputable institutions regarding invasive species of aquatic plants
- ◆ set adequate safeguards for containment and transporting consignments overland
- ◆ track consignments during transit
- ◆ ensure appropriate handling procedures are applied to consignments during interventions for verification or other purposes deemed necessary
- ◆ establish emergency measures for dealing with non-compliance situations.

6.4 Contaminating pests

Pests that are not directly associated with the primary commodity in transit, but are associated with packaging materials of the commodity from the exporting country, may pose some level of risk to the country of transit. The NPPO of the transit country may require that:

- ◆ wood packaging materials are treated in conformity with ISPM 15
- ◆ cargo holds and carriers are disinfected to prevent contamination from pests of other commodities being carried in the same conveyance (this would require strong relationships between the NPPO of the transit country and customs or border-control agencies to cooperate on non-agricultural commodities and containers)
- ◆ customs provides relevant information to the NPPO.

6.5 Fraud

Instances of fraud may include false declarations regarding consignment identity or consignment integrity (including concealing unauthorized regulated articles in consignments), fraudulent labelling and false information about the country or place of origin.

Incidences of fraud regarding a consignment in transit may expose the transit country to significant risk of the introduction of regulated pests. The NPPO should be aware of such occurrences and have adequate measures in place to detect and deal with them.

Beyond customs document checks, the NPPO of the transit country may consider other document checks that may be relevant depending on the technically justified phytosanitary risk. The NPPO may:

- ◆ ensure that documents that identify the consignment match the consignment in transit
- ◆ establish procedures to allow trace-back of consignments in cases in which the consignment integrity and country or origin are in doubt
- ◆ take appropriate phytosanitary measures, including prohibitions and refusal of the consignment to be offloaded from the carrier
- ◆ require immediate exit of the consignment (seizing, destroying and requiring exit of consignments may place extra burden on the resources of the NPPO of the transit country)
- ◆ notify without delay the NPPO of the exporting country and, when appropriate, the NPPO of the importing country
- ◆ require urgent corrective action by the exporting country when it is notified of a non-compliance
- ◆ document instances of non-compliance to guide future actions.

7 Conclusions

Transit situations cover a range of conditions, from simple administrative operations to more complex ones in which the NPPO of the transit country is involved. The decision by the NPPO to intervene should be based on the need to manage a perceived or real risk. The assessment of risk associated with any consignment should be properly assessed, taking into account risk factors outlined in [ISPM 25](#).

Risk management measures should be justifiable and practicable with due regard to national regulatory capacity. Requirements to be met by the exporting country should be clearly defined and reflective of the level of perceived risk. Risk associated with the movement of regulated articles in transit may change if, for example, pest status and regulatory capacities change in the countries involved. Respecting reporting obligations and adequate communication among the countries involved provides the basis for prompt review and adjustments to minimize risk to the transit country.

In many transit situations, the consignments are split up, repacked and moved overland or transhipped to a port of exit from the transit country. The NPPO faces the challenge of having adequate certified facilities in which these activities are conducted. The NPPO, as manager of the transit of regulated articles, has the responsibility to solicit policy support and resources necessary to establish and maintain the required facilities and manage their operation.

The establishment of a national transit system should be supported by appropriate legal frameworks and commitment to a high level of cooperation among border agencies. The relationship among these agencies must be fostered, based on trust, awareness and capability to deal with responsibilities as defined in the relationship. The procedure outlined in this manual requires that the NPPO take the responsibility for the establishment of an effective national transit system. Such a system needs to have good documentation for facilitating timely reviews and improvements.

References and resources

References

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- ISPM 13:2001. *Guidelines for the notification of non-compliance and emergency action*. Rome, IPPC, FAO.
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- Standards and Trade Development Facility. *International trade and Invasive Alien Species*. Geneva, World Trade Organization.
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Additional resources

- International Plant Protection Convention website: <https://www.ippc.int>
- Adopted ISPMs: <https://www.ippc.int/standards>
 - IPPC Convention text: <https://www.ippc.int/text>
- Phytosanitary Resources page: <http://www.phytosanitary.info>
- Manuals, training materials and other resources
 - Materials posted to the page have been reviewed and noted by the IPPC Capacity Development Committee for relevance and consistency with the IPPC framework
- Pest risk analysis training manuals and e-learning course are available at <http://phytosanitary.info/pr>
- Additional materials can be contributed (in any language) through a form on the page, for review by the IPPC Capacity Development Committee
- IPPC helpdesk: <http://irss.ippc.int/helpdesk> – includes a question and answer forum, frequently asked questions and links to additional resources

IPPC

The International Plant Protection Convention (IPPC) is an international plant health agreement that aims to protect cultivated and wild plants by preventing the introduction and spread of pests. International travel and trade are greater than ever before. As people and commodities move around the world, organisms that present risks to plants travel with them.

Organization

- ◆ The number of contracting party signatories to the Convention exceeds 181.
- ◆ Each contracting party has a National Plant Protection Organization (NPPO) and an Official IPPC contact point.
- ◆ 10 Regional Plant Protection Organizations (RPPOs) have been established to coordinate NPPOs in various regions of the world.
- ◆ IPPC liaises with relevant international organizations to help build regional and national capacities.
- ◆ The Secretariat is provided by the Food and Agriculture Organization of the United Nations (FAO-UN).



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