

This appendix was adopted by the Fourth Session of the Commission on Phytosanitary Measures in March–April 2009.

The appendix is for reference purposes only and is not a prescriptive part of the standard.

APPENDIX 1: Terminology of the Convention on Biological Diversity in relation to the Glossary of phytosanitary terms

1. Introduction

Since 2001, it has been made clear that the scope of the IPPC extends to risks arising from pests that primarily affect the environment and biological diversity, including harmful plants. The Technical Panel for the Glossary, which reviews ISPM 5 (*Glossary of phytosanitary terms*, hereinafter referred to as the Glossary), therefore examined the possibility of adding new terms and definitions to the standard to cover this area of concern. In particular, it considered the terms and definitions that are in use by the Convention on Biological Diversity (CBD)*, with a view to adding them to the Glossary, as has previously been done in several cases for the terminology of other intergovernmental organizations.

However, study of the terms and definitions available from the CBD has shown that they are based on concepts different from those of the IPPC, so that similar terms are given distinctly different meanings. The CBD terms and definitions could not accordingly be used directly in the Glossary. It was decided instead to present these terms and definitions in the present Appendix to the Glossary, providing explanations of how they differ from IPPC terminology.

This Appendix is not intended to provide a clarification of the scope of the CBD, nor of the scope of the IPPC.

2. Presentation

In relation to each term considered, the CBD definition is first provided. This is placed alongside an “Explanation in IPPC context”, in which, as usual, Glossary terms (or derived forms of Glossary terms) are shown in **bold**. These explanations may also include CBD terms, in which case these are also in **bold** and followed by “(CBD)”. The explanations constitute the main body of this Appendix. Each is followed by notes, providing further clarification of some of the difficulties.

3. Terminology

3.1 “Alien species”

<i>CBD definition</i>	<i>Explanation in IPPC context</i>
A species, subspecies or lower taxon, introduced outside its natural past ¹ or present distribution; includes any part, gametes, seeds, eggs, or propagules of such species that might survive and subsequently reproduce	An alien² species (CBD) is an individual ³ or population, at any life stage, or a viable part of an organism that is non-indigenous to an area and that has entered⁴ by human agency ⁵ into the area

Notes:

¹ The qualification concerning “past and present” distribution is not relevant for IPPC purposes, since the IPPC is concerned only with existing situations. It does not matter that the species was present in the past if it is present now. The word “past” in the CBD definition presumably allows for the re-introduction of a species into an area where it has recently become extinct and thus a reintroduced species would presumably not be considered an alien species.

² “Alien” refers only to the location and distribution of an organism compared with its natural range. It does not imply that the organism is harmful.

* The terms and definitions discussed in this document have resulted from discussion on invasive alien species by the Parties of the Convention on Biological Diversity (Secretariat of the Convention on Biological Diversity).

³ The CBD definition emphasizes the physical presence of individuals of a species at a certain time, whereas the IPPC concept of occurrence relates to the geographical distribution of the taxon in general.

⁴ For CBD purposes, an alien species is already present in the **area** that is not within its native distribution (see **Introduction** below). The IPPC is more concerned with organisms that are not yet present in the area of concern (i.e. quarantine pests). The term “alien” is not appropriate for them, and terms such as “exotic”, “non-indigenous” or “non-native” have been used in ISPMs. To avoid confusion, it would be preferable to use only one of these terms, in which case “non-indigenous” would be suitable, especially as it can accompany its opposite “indigenous”. “Exotic” is not suitable because it presents translation problems.

⁵ A species that is non-indigenous and has entered an **area** through natural means is not an **alien species (CBD)**. It is simply extending its natural range. For **IPPC** purposes, such a species could still be considered as a potential **quarantine pest**.

3.2 “Introduction”

<i>CBD definition</i>	<i>Explanation in IPPC context</i>
The movement by human agency, indirect or direct, of an alien species ⁶ outside of its natural range (past or present). This movement can be either within a country or between countries or areas beyond national jurisdiction ⁷	The entry of a species into an area where it is non-indigenous , through movement by human agency, either directly from an area where the species is indigenous, or indirectly through successive movement from an area where the species is indigenous through one or several areas where it is not)

Notes:

⁶ The CBD definition suggests that **introduction (CBD)** concerns an **alien species (CBD)**, and thus a species that has already entered the area. However, it may be supposed, on the basis of other documents made available by CBD, that this is not so, and that a non-indigenous species entering for the first time is being **introduced (CBD)**. For CBD, a species can be **introduced (CBD)** many times, but for IPPC a species, once established, cannot be **introduced** again.

⁷ The issue of “areas beyond national jurisdiction” is not relevant for the IPPC.

⁸ In the case of indirect movement, it is not specifically stated in the definition whether all the movements from one **area** to another must be **introductions (CBD)** (i.e. by human agency, intentional or unintentional), whether some can be by natural movement. This question arises, for example, where a species is **introduced (CBD)** into one **area** and then moves naturally to an adjoining **area**. It seems that this may be considered as an indirect **introduction (CBD)**, so that the species concerned is an **alien species (CBD)** in the adjoining area, despite the fact that it **entered** it naturally. In the IPPC context, the intermediate country, from which the natural movement occurs, has no obligation to act to limit the natural movement, though it may have obligations to prevent intentional or unintentional **introduction (CBD)** if the importing country concerned establishes corresponding **phytosanitary measures**.

3.3 “Invasive alien species”

<i>CBD definition</i>	<i>Explanation in IPPC context</i>
An alien species whose introduction and/or spread threaten ⁹ biological diversity ^{10, 11}	An invasive¹² alien species (CBD) is an alien species (CBD) that by its establishment or spread has become injurious to plants¹³ , or that by risk analysis (CBD)¹⁴ is shown to be potentially injurious to plants

Notes:

⁹ The word “threaten” does not have an immediate equivalent in IPPC language. The IPPC definition of a **pest** uses the term “injurious”, while the definition of a **quarantine pest** refers to “economic importance”. ISPM 11 makes it clear that **quarantine pests** may be “injurious” to **plants** directly, or indirectly (via other components of ecosystems), while Supplement 2 of the Glossary explains that “economic importance” depends on a harmful impact on crops, or on the environment, or on some other specific value (recreation, tourism, aesthetics).

¹⁰ **Invasive alien species (CBD)** threaten “biological diversity”. This is not an IPPC term, and the question arises whether it has a scope corresponding to that of the IPPC. “Biological diversity” would then have to be given a wide meaning, extending to the integrity of cultivated plants in agro-ecosystems, non-indigenous **plants** that have been imported and **planted** for forestry, amenity or habitat management, and indigenous **plants** in any **habitat**, whether “man-made” or not. The **IPPC** does protect **plants** in any of these situations, but it is not clear whether the scope of the **CBD** is wide; some definitions of “biological diversity” take a much narrower view.

¹¹ On the basis of other documents made available by CBD, **invasive alien species** may also threaten “ecosystems, habitats or species”.

¹² The CBD definition and its explanation concern the whole term **invasive alien species** and do not address the term “invasive” as such.

¹³ The context of the IPPC is the protection of **plants**. It is clear that there are effects on biological diversity that do not concern **plants**, and so there are **invasive alien species (CBD)** that are not relevant to the **IPPC**. The IPPC is also concerned with **plant products**, but it is not clear to what extent the CBD considers **plant products** as a component of biological diversity.

¹⁴ For the IPPC, organisms that have never entered the **endangered area** can also be considered as potentially injurious to **plants**, as a result of **pest risk analysis**.

3.4 “Establishment”

<i>CBD definition</i>	<i>Explanation in IPPC context</i>
The process ¹⁵ of an alien species in a new habitat successfully producing viable offspring ¹⁶ with a likelihood of continued survival	The establishment of an alien species (CBD) in a habitat in the area it has entered , by successful reproduction

Notes:

¹⁵ **Establishment (CBD)** is a process, not a result. It seems that a single generation of reproduction can be **establishment (CBD)**, provided the offspring have a likelihood of continued survival (otherwise there would be a comma after “offspring”). The CBD definition does not express the **IPPC** concept of “perpetuation for the foreseeable future”.

¹⁶ It is not clear how far “offspring” applies to organisms that propagate themselves vegetatively (many **plants**, most fungi, other micro-organisms). By using “perpetuation”, the **IPPC** avoids the question of reproduction or replication of individuals altogether. It is the species as a whole that survives. Even the growth of long-lived individuals to maturity could be considered to be perpetuation for the foreseeable future (e.g. plantations of a non-indigenous **plant**).

3.5 “Intentional introduction”

<i>CBD definition</i>	<i>Explanation in IPPC context</i>
Deliberate movement and/or ¹⁷ release by humans of an alien species outside its natural range	Deliberate movement of a non-indigenous species into an area , including its release into the environment ¹⁸

Notes:

¹⁷ The “and/or” of the CBD definition is difficult to understand.

¹⁸ Under most phytosanitary import regulatory systems the intentional introduction of regulated pests is prohibited.

3.6 “Unintentional introduction”

<i>CBD definition</i>	<i>Explanation in IPPC context</i>
All other introductions which are not intentional	Entry of a non-indigenous species with a traded consignment , which it infests or contaminates , or by some other human agency including pathways such as passengers, baggage, vehicles, artificial waterways

Notes:

¹⁹ The prevention of unintentional introduction of regulated pests is an important focus of phytosanitary import regulatory systems.

3.7 “Risk analysis”

<i>CBD definition</i>	<i>Explanation in IPPC context</i>
1) the assessment of the consequences of the introduction and of the likelihood of establishment of an alien species using science-based information (i.e., risk assessment), and 2) the identification of measures that can be implemented to reduce or manage these risks (i.e., risk management), taking into account socio-economic and cultural considerations ²¹	Risk analysis (CBD) ²² is: 1) evaluation of the probability of establishment and spread , within an area ²³ , of an alien species (CBD) that has entered that area , 2) evaluation of the associated potential undesirable consequences, and 3) evaluation and selection of measures to reduce the risk of such establishment and spread

Notes:

²⁰ It is not clear what kinds of consequences are considered.

²¹ It is not clear at what stages in the process of **risk analysis (CBD)** socio-economic and cultural considerations are taken into account (during assessment, or during management, or both). No explanation can be offered in relation to ISPM 11 or Supplement 2 of ISPM 5.

²² This explanation is based on the IPPC definitions of **pest risk assessment** and **pest risk management**, rather than on that of **pest risk analysis**.

²³ It is unclear whether **risk analysis (CBD)** may be conducted prior to **entry**, in which case the probability of **introduction** may also need to be assessed, and measures evaluated and selected to reduce the risk of **introduction**. It may be supposed (on the basis of other documents made available by CBD) that **risk analysis (CBD)** can identify measures restricting further introductions, in which case it relates more closely to **pest risk analysis**.

4. Other concepts

The CBD does not propose definitions of other terms, but does use a number of concepts that do not seem to be considered in the same light by the IPPC and the CBD, or are not distinguished by the IPPC. These include:

- border controls
- quarantine measures
- burden of proof
- natural range or distribution
- precautionary approach
- provisional measures
- control
- statutory measures
- regulatory measures
- social impact
- economic impact.

5. References

CBD. 1992. *Convention on Biological Diversity*. Montreal, CBD.

CBD. *Glossary of terms* (available at <http://www.cbd.int/invasive/terms.shtml>, accessed November 2008).

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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

- ◆ There are over 180 contracting parties to the IPPC.
- ◆ Each contracting party has a national plant protection organization (NPPO) and an Official IPPC contact point.
- ◆ Nine regional plant protection organizations (RPPOs) work to facilitate the implementation of the IPPC in their countries.
- ◆ 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).

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