Para	Text	Comment
G	(General Comment)	*Category : TECHNICAL* **(320) Venezuela (1 Oct 2016 3:01 AM)** El grupo de Venezuela no tiene comentarios por ahora
G	(General Comment)	*Category : SUBSTANTIVE* **(304) Canada (30 Sep 2016 7:50 PM)** Canada supports the draft ISPM on international movement of wood.
G	(General Comment)	*Category : SUBSTANTIVE* **(303) Guyana (30 Sep 2016 6:45 PM)** We accept the contents of the document.
G	(General Comment)	*Category : TECHNICAL* **(299) Congo (30 Sep 2016 2:05 AM)** j'accepte ce projet de NIMP tel qu'il est
G	(General Comment)	*Category : EDITORIAL* **(285) EPPO (29 Sep 2016 5:51 PM)** IPPC Secretariat to ensure ISPM titles be written in italics
G	(General Comment)	*Category : SUBSTANTIVE* **(256) Norway (29 Sep 2016 5:38 PM)** GENERAL COMMENT: Norway would like to formally endorse the EPPO comments submitted via the IPPC Online Comment System
G	(General Comment)	*Category : SUBSTANTIVE* **(255) Barbados (29 Sep 2016 5:04 PM)** This document offers a good guideline covering The International Movement of Wood.
G	(General Comment)	*Category : TECHNICAL* **(247) Iraq (28 Sep 2016 11:28 AM)** No comments
G	(General Comment)	*Category : TECHNICAL* **(246) Iraq (28 Sep 2016 11:26 AM)** No comments
G	(General Comment)	*Category : SUBSTANTIVE* **(223) New Zealand (27 Sep 2016 11:05 PM)** We appreciate the work done on this draft. However, we still find that it does not have requirements sufficient for it to be a standard. It really constitutes slightly advanced PRA information.
G	(General Comment)	*Category : EDITORIAL* **(187) PPPO (25 Sep 2016 10:55 PM)** PPPO Has no further comment on the draft ISPM
G	(General Comment)	*Category : SUBSTANTIVE* *Attachment : 2006-029_InternationalMovementWood_2016-09-21_AttachedToOCS.docx* **(99) United States of America (21 Sep 2016 4:30 PM)** The structure of the standard needs to be improved (see attached file). Concepts repeat themselves throughout the sections, for example pest risk associated with

		bark. The standard is overloaded with information that, while being an important guidance material, does not add any value and appears as a manual rather than an ISPM. This seem to be similar to the concern expressed by NZ in its formal objection at the CPM-10 (2015). We have incorporated these specific suggestions by redrafting the standard (see attached file). Apart from the recommendations below on the Tables 1-5, you can find specific US comments on the relevant paragraphs. The US suggests that Tables 1, 2, and 5 be moved as appendixes to this ISPM. See comments to the relevant paragraphs. The US suggests deleting Tables 3 and 4 because they don't bring any value to the standard. See comments to the relevant paragraphs.
G	(General Comment)	*Category : TECHNICAL* **(92) Australia (20 Sep 2016 12:31 PM)** Include technical supporting references. There are no scientific references supporting the claims that de-barking eliminates most bark beetles etc. and also prevents post-harvest infestation by other wood pests such as wood wasps and large wood borers (e.g. Monochamus spp.). Should quote references for international guidelines.
G	(General Comment)	*Category : TECHNICAL* **(80) Samoa (20 Sep 2016 3:13 AM)** no further comment
G	(General Comment)	*Category : SUBSTANTIVE* **(63) South Africa (15 Sep 2016 3:54 PM)** • Replacement of the word “quarantine” with “regulated”. The terminology as defined in ISPM 5 (2009). Glossary of phytosanitary terms. includes both quarantine and regulated non--quarantine pests.
G	(General Comment)	*Category : SUBSTANTIVE* **(62) South Africa (15 Sep 2016 3:54 PM)** • Replacement of the word “quarantine” with “regulated”. The terminology as defined in ISPM 5 (2009). Glossary of phytosanitary terms. includes both quarantine and regulated non--quarantine pests.
G	(General Comment)	*Category : SUBSTANTIVE* **(61) South Africa (15 Sep 2016 3:54 PM)** • Replacement of the word “quarantine” with “regulated”. The terminology as defined in ISPM 5 (2009). Glossary of phytosanitary terms. includes both quarantine and regulated non--quarantine pests. • Deletion of the word “sometimes” to provide clarity and simplicity to the text.
G	(General Comment)	*Category : SUBSTANTIVE* **(60) South Africa (15 Sep 2016 3:53 PM)** • Addition of the wordings “However irradiation protocols should be developed for each specific pest group as indicated on table 1.” to provide contextual clarification as there is no indication of irradiation dosage on specific wood pests.
G	(General Comment)	*Category : SUBSTANTIVE* **(59) South Africa (15 Sep 2016 3:53 PM)** • Addition of the word “mites”. Reason being that mites can be transported on wood products and on insects infesting wood. It is not so much that the mites are pests of wood but that alien invasive mites could be introduced via wood products and for consistency with addition on the first column of table 1.

G	(General Comment)	*Category : SUBSTANTIVE* **(58) South Africa (15 Sep 2016 3:52 PM)** • Addition of the word "mites". Reason being that mites can be transported on wood products and on insects infesting wood. It is not so much that the mites are pests of wood but that alien invasive mites could be introduced via wood products and for consistency with addition on the first column of table 1.
G	(General Comment)	*Category : SUBSTANTIVE* **(57) South Africa (15 Sep 2016 3:52 PM)** • Replacement of the word "quarantine" with "regulated". The terminology as defined in ISPM 5 (2009). Glossary of phytosanitary terms. includes both quarantine and regulated non--quarantine pests.
G	(General Comment)	*Category : SUBSTANTIVE* **(56) South Africa (15 Sep 2016 3:52 PM)** • Deletion of the word "monitoring" in order to provide contextual clarification and to highlight obligations of the NPPO in terms of the IPPC new revised text of 1997, Article IV.
G	(General Comment)	*Category : SUBSTANTIVE* **(55) South Africa (15 Sep 2016 3:51 PM)** • Addition of the word "mites" to be consistent with addition on the first column of table 1. Reason being that mites can be transported on wood products and on insects infesting wood. It is not so much that the mites are pests of wood but that alien invasive mites could be introduced via wood products.
G	(General Comment)	*Category : SUBSTANTIVE* **(54) South Africa (15 Sep 2016 3:51 PM)** • Addition of the wordings "with high probability" and "with low to negligible probability" to provide clarity on risk ratings in terms of ISPM 11 (2004). Pest Risk Analysis for quarantine pests, including analysis of environmental risks and living modified organisms: and to align it with table 2. • • Addition of the word "mites" on the second column of table 4. Reason being that mites can be transported on wood products and on insects infesting wood. It is not so much that the mites are pests of wood but that alien invasive mites could be introduced via wood products.
G	(General Comment)	*Category : SUBSTANTIVE* **(53) South Africa (15 Sep 2016 3:50 PM)** • Addition of the wordings "with high probability" and "with low to negligible probability" to provide clarity on risk ratings in terms of ISPM 11 (2004). Pest Risk Analysis for quarantine pests, including analysis of environmental risks and living modified organisms: and to align it with table 2. • Addition of the word "mites" on the first column of table 3. Reason being that mites can be transported on wood products and on insects infesting wood. It is not so much that the mites are pests of wood but that alien invasive mites could be introduced via wood products

G	(General Comment)	*Category : SUBSTANTIVE* **(52) South Africa (15 Sep 2016 3:50 PM)** • Replacement of the word "quarantine" with "regulated". The terminology as defined in ISPM 5 (2009). Glossary of phytosanitary terms. includes both quarantine and regulated non--quarantine pests.
G	(General Comment)	*Category : SUBSTANTIVE* **(51) South Africa (15 Sep 2016 3:50 PM)** • Addition of the wordings "with high probability" and "with low to negligible probability" to provide clarity on risk ratings in terms of ISPM 11 (2004). Pest Risk Analysis for quarantine pests, including analysis of environmental risks and living modified organisms. • Addition of the wording "mites" on the first column of table 1. Reason being that mites can be transported on wood products and on insects infesting wood. It is not so much that the mites are pests of wood but that alien invasive mites could be introduced via wood products.
G	(General Comment)	*Category : SUBSTANTIVE* **(50) South Africa (15 Sep 2016 3:49 PM)** Replacement of the word "quarantine" with "regulated". The terminology as defined in ISPM 5 (2009). Glossary of phytosanitary terms. includes both quarantine and regulated non--quarantine pests.
G	(General Comment)	*Category : EDITORIAL* **(49) South Africa (15 Sep 2016 3:49 PM)** • Change of the number of pest groups from 17 to 18 due to the addition of mites as one of the pest groups of wood
G	(General Comment)	*Category : TECHNICAL* **(48) South Africa (15 Sep 2016 3:48 PM)** • Addition of "Aphididae" because it is also one of the pest group of wood. • • Addition of "Brevipalpidae" and "Tetranychidae" due to fact that these are pest groups that are related to mites and can be pests of wood.
G	(General Comment)	*Category : SUBSTANTIVE* **(47) South Africa (15 Sep 2016 3:48 PM)** • Addition of "and Ambrosia" due to fact that it's also a quarantine pest and also a vector for some fungi. • • Addition of "Sesiidae and Hepialidae" due to fact that these are also other pest groups that are related to wood. •
G	(General Comment)	*Category : SUBSTANTIVE* **(46) South Africa (15 Sep 2016 3:47 PM)** • Addition of "and mites" on the first column of table 1. Reason being that mites can be transported on wood products and on insects infesting wood. It is not so much that the mites are pests of wood but that alien invasive mites could be introduced via wood products

G	(General Comment)	*Category : EDITORIAL* **(45) South Africa (15 Sep 2016 3:47 PM)** • Deletion of the word "actually" to provide a clear and more correct wording.
G	(General Comment)	*Category : SUBSTANTIVE* **(44) South Africa (15 Sep 2016 3:46 PM)** • Addition of "commodity specific" and "to apply", and deletion of "on" in order to provide contextual clarity to the sentence. • Replacement of the word "quarantine" with "regulated". The terminology as defined in ISPM 5 (2009). Glossary of phytosanitary terms. includes both quarantine and regulated non--quarantine pests.
G	(General Comment)	*Category : SUBSTANTIVE* **(43) South Africa (15 Sep 2016 3:46 PM)** • Replacement of the word "quarantine" with "regulated". The terminology as defined in ISPM 5 (2009). Glossary of phytosanitary terms. includes both quarantine and regulated non--quarantine pests.
G	(General Comment)	*Category : SUBSTANTIVE* **(42) South Africa (15 Sep 2016 3:46 PM)** Replacement of the word "quarantine" with "regulated". The terminology as defined in ISPM 5 (2009). Glossary of phytosanitary terms. includes both quarantine and regulated non--quarantine pests.
G	(General Comment)	*Category : SUBSTANTIVE* **(41) South Africa (15 Sep 2016 3:45 PM)** Replacement of the word "quarantine" with "regulated". The terminology as defined in ISPM 5 (2009). Glossary of phytosanitary terms. includes both quarantine and regulated non--quarantine pests.
G	(General Comment)	*Category : SUBSTANTIVE* **(28) Tajikistan (29 Aug 2016 1:51 PM)** I support the document as it is and I have no comments
G	(General Comment)	*Category : SUBSTANTIVE* **(2) China (23 Jul 2016 6:24 AM)** Classification and grading treatment : Aiming at different types and species of wood, planning different grading management method. **China (23 Jul 2016 6:24 AM)** To clarify more clearly.
49	This standard provides guidance for the assessment of the pest risk of wood and describes phytosanitary measures which may be used to reduce the risk of introduction and spread of quarantine pests associated with the international movement of wood, in particular those that infest trees.	*Category : SUBSTANTIVE* **(64) South Africa (16 Sep 2016 10:56 AM)** Replacement of the word "quarantine" with "regulated". The terminology as defined in ISPM 5 (2009). Glossary of phytosanitary terms. includes both quarantine and regulated non--quarantine pests.
50	This standard covers wood commodities such as: (1) round wood and sawn wood (with or without bark); and (2) materials from the mechanical processing of wood such as wood chips, sawdust, wood wool and wood residue (all with or without bark). This standard covers wood of gymnosperms and angiosperms (i.e.	*Category : EDITORIAL* **(220) New Zealand (27 Sep 2016 10:15 PM)** Movement of bracket makes more sense

	~~dicotyledons~~ dicotyledons) and some monocotyledons, such as ~~palms)~~ palms, but not bamboo.	
50	This standard covers only wood commodities ~~such as~~which were subject to mechanical processing but not beyond. Mechanically processed wood referred to throughout this standard includes: (1) round wood and sawn wood (with or without bark); and (2) materials from the mechanical processing of wood such as wood chips, sawdust, wood wool and wood residue (all with or without bark). Composite wood (e.g. oriented strand board, and pressure treated, glued, or heated wood) is not covered by this standard). This standard covers wood of gymnosperms and angiosperms (i.e. dicotyledons and some monocotyledons, such as palms) but not bamboo.	*Category : SUBSTANTIVE* **(100) United States of America (21 Sep 2016 4:33 PM)** Clarification to point out that it is ONLY the raw commodity subjected to mechanical processing is referenced. The standard does not cover raw commodity subjected to pressure, gluing, etc. Could add specific examples of what is not covered, such as pellets, plywood, glulam, etc., in a footnote.
50	This standard covers wood commodities such as: (1) round wood and sawn wood (with or without bark); and (2) materials from the mechanical processing of wood such as wood chips, sawdust, wood wool and wood residue (all with or without bark). This standard covers wood of gymnosperms and angiosperms (i.e. dicotyledons and some monocotyledons, such as palms) but not ~~bamboo~~bamboo and rattan.	*Category : TECHNICAL* **(22) Indonesia (25 Jul 2016 5:16 AM)**
52	Products manufactured from wood (such as ~~furniture)~~ furniture), processed wood material and wooden handicrafts are not covered in this standard.	*Category : TECHNICAL* **(257) EPPO (29 Sep 2016 5:51 PM)** To further clarify the scope
52	Products manufactured from wood (such as ~~furniture)~~ furniture), processed wood material and wooden handicrafts are not covered in this standard.	*Category : TECHNICAL* **(192) European Union (27 Sep 2016 6:41 PM)** to further clarify the Scope, - even if processed wood material as per ISPM 5 does not belong to wood.
53	Wood may also carry contaminating pests~~,~~; however, they are not covered under this standard.	*Category : EDITORIAL* **(101) United States of America (21 Sep 2016 4:33 PM)** Grammar fix
55	The present standard also refers to other International Standards for Phytosanitary Measures (ISPMs). ISPMs are available on the ~~IPP~~ IPPC website at https://www.ippc.int/core-activities/standards-setting/ispms.	*Category : EDITORIAL* **(221) New Zealand (27 Sep 2016 10:17 PM)** Not sure - is it IPP or IPPC website
57	**FAO.** 2009. *Global review of forest pests and diseases.* FAO Forestry Paper 156. Rome. 222 pp. FAO. 2011. Guide to the Implementation of Phytosanitary Standards in Forestry.	*Category : TECHNICAL* **(102) United States of America (21 Sep 2016 4:34 PM)** See US comment in paragraph 71.
61	Pest risk varies among wood commodities such as round wood, sawn wood and wood material resulting from mechanical processing depending on the level of processing that the wood has undergone. ~~This standard provides guidance on the pest risk associated with the wood commodities and the phytosanitary measures which may be applied to manage the pest risk.~~	*Category : TECHNICAL* **(258) EPPO (29 Sep 2016 5:51 PM)** Such sentence (stating what is in the standard) does not belong to Outline, and in this case unnecessarily repeats the Scope text.
61	Pest risk varies among wood commodities such as round wood, sawn wood and wood material resulting from mechanical processing depending on the level of	*Category : TECHNICAL* **(193) European Union (27 Sep 2016 6:41 PM)**

	processing that the wood has undergone. ~~This standard provides guidance on the pest risk associated with the wood commodities and the phytosanitary measures which may be applied to manage the pest risk.~~	Such sentence (stating what is in the standard) does not belong to the Outline, and in this case unnecessarily repeats the Scope text.
62	Pest risk analysis (PRA) can be undertaken by either the national plant protection organization (NPPO) of the importing country ~~should provide~~ or the export country. The NPPO of the importing country however, is responsible for providing the technical justification for phytosanitary import requirements for quarantine pests associated with the international movement of wood.	*Category : TECHNICAL* **(289) United States of America (29 Sep 2016 7:26 PM)** PRA is usually done by the importing NPPO, but it could be done by anyone. The key point is that the importing country is responsible for justifying its decisions with a PRA
63	~~Options for~~ Proportionate to the pest risk identidfied, phytosanitary measures for managing the pest risk related to wood, including bark removal, treatment, chipping and inspection ~~are described in this standard~~should be applied.	*Category : TECHNICAL* **(259) EPPO (29 Sep 2016 5:51 PM)** Such sentence (stating what is in the standard) does not belong to Outline. Sentence rephrased to capture the same meaning in correct style and reflect the draft ISPM text.
63	~~Options for~~ Proportionate to the pest risk identified, phytosanitary measures for managing the pest risk related to wood, including bark removal, treatment, chipping and inspection ~~are described in this standard~~should be applied.	*Category : TECHNICAL* **(194) European Union (27 Sep 2016 6:41 PM)** Such statement (stating what is in the standard) does nor belong to the Outline. Sentence rephrased to capture the same meaning in correct style and reflect the draft ISPM text.
63	Options for phytosanitary measures for managing the pest risk ~~related to~~ analysis for wood, including bark removal, treatment, chipping and inspection are described in this standard.	*Category : EDITORIAL* **(19) Indonesia (25 Jul 2016 4:48 AM)**
64	The NPPO of the importing country may require a treatment, including the removal of bark (to produce debarked or bark-free ~~wood)~~ wood), as a phytosanitary import requirement.	*Category : TECHNICAL* **(306) Canada (30 Sep 2016 7:53 PM)** Comment to include other treatment options.
64	The NPPO of the importing country may require the removal of bark (to produce debarked or bark-free wood) as a phytosanitary import ~~requirement~~requirement where technically justified.	*Category : TECHNICAL* **(290) United States of America (29 Sep 2016 7:26 PM)** Where justified!
64	~~The NPPO of the importing country may require the removal of bark (to produce debarked or bark-free wood) as a phytosanitary import requirement.~~	*Category : EDITORIAL* **(81) Australia (20 Sep 2016 9:38 AM)** Delete as repetition of previous paragraph
66	Wood ~~may carry pests that had~~ produced from infested trees ~~from which the wood was produced~~may carry pests. These pests may then infest trees in the PRA area. This is the pest risk primarily dealt with in this standard.	*Category : EDITORIAL* **(305) Canada (30 Sep 2016 7:52 PM)** Editorial change for better clarity of sentence.
66	Wood may carry pests that had infested trees or woody plants from which the wood was produced. These pests may then infest trees in the PRA area. This is the pest risk primarily dealt with in this standard.	*Category : TECHNICAL* **(260) EPPO (29 Sep 2016 5:51 PM)** Less retsrictive, and tree is not defined in ISPM 5
66	Wood ~~may carry pests that had~~ produced from infested trees ~~from which the wood was produced~~or shrubs may carry pests. These pests may then infest trees in the PRA area. This is the pest risk primarily dealt with in this standard.	*Category : TECHNICAL* **(195) European Union (27 Sep 2016 6:41 PM)** More inclusive text about the possible sources of infestation, recognizing that the definition of wood as well as the scope of this standard include wood chips and waste, that may well originate from shrubs. Sentence turned round for simplification.

66	Wood ~~may carry pests that had~~ produced from infested trees ~~from which the wood was produced~~may carry pests. These pests may then infest trees in the PRA area. This is the pest risk primarily dealt with in this standard.	*Category : EDITORIAL* **(103) United States of America (21 Sep 2016 4:34 PM)** For clarity
67	Wood may also become infested after harvesting. The pest risk in such cases is for pests that infest harvested wood, rather than for pests infesting trees. The risk of such infestation is closely tied to the condition of the wood (i.e. including the size of pieces, presence or absence of bark, and moisture content, safeguarding).	*Category : TECHNICAL* **(104) United States of America (21 Sep 2016 4:36 PM)** To clarify the conditions under which re-infestation may depend.
67	Wood may also become infested by some pests after harvesting. ~~The pest risk in such cases is for pests that infest harvested wood, rather than for pests infesting trees.~~	*Category : TECHNICAL* **(82) Australia (20 Sep 2016 9:40 AM)** Some pests can attack live and harvested wood, so not accurate.
68	Pests that have been shown historically to move with wood in international trade and establish in new areas include: insects that oviposit on bark (e.g. Lymantriidae), wood wasps, wood borers, wood-inhabiting nematodes, and certain fungi with dispersal stages that can be transported ~~on~~ with wood. Therefore, wood (with or without bark) moved in international trade is a potential pathway for the introduction and spread of quarantine pests.	*Category : TECHNICAL* **(261) EPPO (29 Sep 2016 5:51 PM)** 'On' is technically too restrictive
68	Pests that have been shown historically to move with wood in international trade and establish in new areas include: insects that oviposit on bark (e.g. Lymantriidae), wood wasps, wood borers, wood-inhabiting nematodes, and certain fungi with dispersal stages that can be ~~transported on~~ transported with wood. Therefore, wood (with or without bark) moved in international trade is a potential pathway for the introduction and spread of quarantine pests.	*Category : TECHNICAL* **(196) European Union (27 Sep 2016 6:41 PM)** 'on' is technically too restrictive
68	Pests ~~that have been shown historically to~~ move with wood in international trade and establish in new areas ~~include: insects that oviposit on bark (e.g. Lymantriidae), wood wasps, wood borers, wood-inhabiting nematodes,~~ and ~~certain fungi with dispersal stages that can be transported on wood~~are referenced in Table 1 and Table 2. Therefore, wood (with or without bark) moved in international trade is a potential pathway for the introduction and spread of quarantine pests.	*Category : EDITORIAL* **(105) United States of America (21 Sep 2016 4:37 PM)** Suggest to not use specific examples in body of text.
69	Wood is commonly moved as round wood, sawn wood and mechanically processed wood. The pest risk presented by a wood commodity depends on a range of characteristics, such as the commodity's type, the level of processing and the presence or absence of bark, and on factors such as the wood's origin, age, the species, the intended use and any treatment applied to the wood.	*Category : TECHNICAL* **(262) EPPO (29 Sep 2016 5:51 PM)** Also age influences the risk level
69	Wood is commonly moved as round wood, sawn wood and mechanically processed wood. The pest risk presented by a wood commodity depends on a range of characteristics, such as the commodity's type, the level of processing and the presence or absence of bark, and on factors such as the wood's origin, age, the species, the intended use and any treatment applied to the wood.	*Category : TECHNICAL* **(197) European Union (27 Sep 2016 6:41 PM)** Age also influences the risk level

70	Wood is usually moved internationally to a specific destination and for a specific intended use. However, wood in trade is increasingly moved by intermediaries, whose practices of handling commodities may complicate the identification of its origin and intended use. Given the frequency of association between key pest groups and key wood commodities, it is important to provide guidance on phytosanitary measures. This standard provides guidance for effectively ~~managing~~ assessing the risk of quarantine pests and for harmonizing the use of appropriate phytosanitary measures.	*Category : TECHNICAL* **(291) United States of America (29 Sep 2016 7:29 PM)** Unclear. Before managing risk, it should be assessed and then the measures can be harmonized if necessary
70	Wood is usually moved internationally to a specific destination and for a specific intended use. ~~However, wood in trade is increasingly moved by intermediaries, whose practices of handling commodities may complicate the identification of its origin and intended use.~~ Given the frequency of association between key pest groups and key wood commodities, it is important to provide guidance on phytosanitary measures. This standard provides guidance for effectively managing the risk of quarantine pests and for harmonizing the use of appropriate phytosanitary measures.	*Category : EDITORIAL* **(106) United States of America (21 Sep 2016 4:37 PM)** Doesn't add any value. Too detailed and unnecessary information for this standard.
70	~~Wood is usually moved internationally to a specific destination and for a specific intended use. However, wood in trade is increasingly moved by intermediaries, whose practices of handling commodities may complicate the identification of its origin and intended use. Given the frequency of association between key pest groups and key wood commodities, it is important to provide guidance on phytosanitary measures. This standard provides guidance for effectively managing the risk of quarantine pests and for harmonizing the use of appropriate phytosanitary measures.~~	*Category : SUBSTANTIVE* **(66) South Africa (16 Sep 2016 11:04 AM)** • Addition of "commodity specific" and "to apply", and deletion of "on" in order to provide contextual clarity to the sentence. • Replacement of the word "quarantine" with "regulated". The terminology as defined in ISPM 5 (2009). Glossary of phytosanitary terms. includes both quarantine and regulated non--quarantine pests.
71	The FAO publication Global review of forest pests and diseases (2009) provides information on some of the major forest pests of the world. The FAO Guide to the Implementation of Phytosanitary Standards in Forestry (2011) provides information on best management practices that reduce pest risk during growing, harvesting and shipping wood.	*Category : TECHNICAL* **(107) United States of America (21 Sep 2016 4:38 PM)** Suggest adding this reference: http://www.fao.org/docrep/013/i2080e/i2080e.pdf
72	To differentiate wood from bark as used in this standard, a drawing and photographs of a cross-section of round wood and sawn wood are provided in Appendix 1.	*Category : EDITORIAL* **(263) EPPO (29 Sep 2016 5:51 PM)** pictures of both around and sawn wood are in the appendix
72	To differentiate wood from bark as used in this standard, a drawing and photographs of a cross-section of round wood and sawn wood are provided in Appendix 1.	*Category : EDITORIAL* **(198) European Union (27 Sep 2016 6:41 PM)** Also sawn wood is actually shown
74	Implementation of this standard is considered to reduce significantly the likelihood of introduction and spread of quarantine pests thereby contributing to tree health	*Category : SUBSTANTIVE* **(224) Philippines (28 Sep 2016 5:11 AM)** We propose to use official measure because we need to address not only quarantine

	and the protection of forest biodiversity. Certain treatments may have a negative impact on the environment and countries are encouraged to promote the use of ~~phytosanitary~~ official measures that are environmentally acceptable.	pest but also regulated non-quarantine pest as per our propose definition on the amended ISPM 5
74	Implementation of this standard is considered to reduce significantly the likelihood of introduction and spread of quarantine pests thereby contributing to tree health and the protection of forest biodiversity. Certain treatments may have a negative impact on the environment and countries are encouraged to promote the use of phytosanitary measures that are ~~environmentally acceptable~~not detrimental to the environment.	*Category : EDITORIAL* **(83) Australia (20 Sep 2016 9:42 AM)** more appropriate wording
74	Implementation of this standard is considered to reduce significantly the likelihood of introduction and spread of quarantine pests thereby contributing to tree health and the protection of forest biodiversity. Certain treatments may have a negative impact on the environment and countries are encouraged to promote the use of phytosanitary measures that are environmentally acceptable.	*Category : SUBSTANTIVE* **(65) South Africa (16 Sep 2016 10:59 AM)** • Replacement of the word "quarantine" with "regulated". The terminology as defined in ISPM 5 (2009). Glossary of phytosanitary terms. includes both quarantine and regulated non--quarantine pests.
77	The pest risk of the commodities addressed in this standard varies depending on the wood's origin, species and characteristics, the level of processing or the treatment the wood has undergone, intended use and the presence or absence of bark.	*Category : TECHNICAL* **(307) Canada (30 Sep 2016 7:54 PM)** Elaborating on factors influencing pest risk.
77	The pest risk of the commodities addressed in this standard varies depending on the wood's origin, species and characteristics, the level of processing or the ~~treatment~~ treatment, the wood has undergone, ~~and the~~ presence or absence of bark, and intended use.	*Category : TECHNICAL* **(292) United States of America (29 Sep 2016 7:31 PM)** Clarification
77	~~The pest risk of the commodities addressed in this standard varies depending on the wood's origin, species and characteristics, the level of processing or the treatment the wood has undergone, and the presence or absence of bark.~~ The pest risk of the commodities addressed in this standard varies depending on the wood's origin, species, the treatment the wood has undergone and characteristics such as, commodity type, the level of processing or the treatment the wood has undergone, and the presence or absence of bark.	*Category : SUBSTANTIVE* **(84) Australia (20 Sep 2016 9:44 AM)** Changes to make consistent with paragraph 69.
78	This standard describes the general pest risk related to each wood commodity by indicating the major pest groups associated with it. Although the wood commodities described may be commonly infested with certain pest groups, the pest risk actually presented may depend on factors such as species, size, moisture content and intended use of the wood, ~~and~~ pest status at the origin and destination, and duration and mode of transport.	*Category : TECHNICAL* **(308) Canada (30 Sep 2016 7:59 PM)** Pest risk factors elaborated
78	This standard describes the general pest risk related to each wood commodity by indicating the major pest groups associated with it. ~~Although the wood commodities described may be commonly infested with certain pest groups, the pest risk actually presented may depend on factors such as species, size, moisture content and intended use of the wood, and pest status at the origin and destination.~~	*Category : EDITORIAL* **(108) United States of America (21 Sep 2016 4:39 PM)** Propose second sentence for deletion because it is redundant with paragraph 77.

78	This standard describes the general pest risk related to each wood commodity by indicating the major pest groups associated with it. Although the wood commodities described may be commonly infested with certain pest groups, the pest risk actually presented may depend on factors such as species, age, size, moisture content and intended use of the wood, and pest status at the origin and destination.	*Category : TECHNICAL* **(264) EPPO (29 Sep 2016 5:51 PM)** Also age influencing the risk level
78	This standard describes the general pest risk related to each wood commodity by indicating the major pest groups associated with it. Although the wood commodities described may be commonly infested with certain pest groups, the pest risk actually presented may depend on factors such as species, age, size, moisture content and intended use of the wood, and pest status at the origin and destination.	*Category : TECHNICAL* **(199) European Union (27 Sep 2016 6:41 PM)** Age also influences the risk level
78	This standard describes the general pest risk related to each wood commodity by indicating the major pest groups associated with it. Although the wood commodities described may be commonly infested with certain pest groups, the pest risk actually presented may depend on factors such as species, size, moisture content and intended use of the wood, and pest status at the origin and destination.	*Category : EDITORIAL* **(67) South Africa (16 Sep 2016 11:07 AM)** • Deletion of the word "actually" to provide a clear and more correct wording.
79	Phytosanitary measures should not be required without appropriate technical justification based on PRA (as described in ISPM 2 (*Framework for pest risk analysis*) and ISPM 11 (*Pest risk analysis for quarantine pests*)), taking into account:	*Category : TECHNICAL* **(251) Kenya (29 Sep 2016 4:45 PM)** - Invasiveness of pests associated with wood Should be included
85	Wood may be infested by pests present in the area of origin at the time of growing or harvesting. Several factors can influence a pest's ability to infest trees or wood. These factors can also affect the ability of the pest to survive on or in the harvested wood. Such factors are: outbreaks of pests in the area of origin, forestry management practices, conditions during transportation and storage time, place and conditions and treatments applied to the wood once ~~felled~~harvested. These factors should be considered when evaluating the probability of introduction and spread of quarantine pests.	*Category : TECHNICAL* **(309) Canada (30 Sep 2016 8:06 PM)** Harvested better word than felled.
85	Wood may be infested by pests present in the area of origin at the time of growing or harvesting. Several factors can influence a pest's ability to infest trees or wood. These factors can also affect the ability of the pest to survive on or in the harvested wood. Such factors are: outbreaks of pests in the area of origin, forestry management practices, conditions during ~~transportation and~~ transportation, storage time, place and ~~conditions~~ conditions, and treatments applied to the wood once felled. These factors should be considered when evaluating the probability of introduction and spread of quarantine pests.	*Category : EDITORIAL* **(265) EPPO (29 Sep 2016 5:51 PM)** it is clearer with two additional commas

85	Wood may be infested by pests present in the area of origin at the time of growing or harvesting. Several factors can influence a pest's ability to infest trees or wood. These factors can also affect the ability of the pest to survive on or in the harvested wood. Such factors are: outbreaks of pests in the area of origin, forestry management practices, conditions during ~~transportation~~ transportation, and storage time, place and ~~conditions~~ conditions, and treatments applied to the wood once felled. These factors should be considered when evaluating the probability of introduction and spread of quarantine pests.	*Category : EDITORIAL* **(200) European Union (27 Sep 2016 6:41 PM)** Clearer with two additional commas
85	Wood may be infested by pests present in the area of origin at the time of growing or ~~harvesting~~harvesting and can move with traded wood (Appendix X, Tables 1 and 2). Several factors can influence a pest's ability to infest trees ~~or wood. These factors can also affect the ability of the pest to~~ and survive ~~on or~~ in the harvested wood~~. Such factors are~~: outbreaks of pests in the area of origin, forestry management practices, conditions during transportation and storage time, place and conditions and treatments applied to the wood once felled. These factors should be considered when evaluating the probability of introduction and spread of quarantine pests.	*Category : EDITORIAL* **(109) United States of America (21 Sep 2016 4:41 PM)** To simplify and streamline
85	Wood may be infested by pests present in the area of origin at the time of growing or harvesting. Several factors can influence a pest's ability to infest trees or wood. These factors can also affect the ability of the pest to survive on or in the harvested wood. Such factors are: ~~outbreaks of pests in the area of origin,~~ forestry management practices, conditions during transportation and storage time, place and conditions and treatments applied to the wood once felled. These factors should be considered when evaluating the probability of introduction and spread of quarantine pests.	*Category : TECHNICAL* **(86) Australia (20 Sep 2016 9:48 AM)** This is not a factor that affects the ability of the pest to survive on or in the wood.
86	In general, the greater the level of processing or treatment of the wood after harvest, the greater the reduction in pest risk. However, it should be noted that processing may change the ~~nature of the~~ pest risk. For example, chipping reduces the presence of certain insect pests but increases in surface area of the wood may facilitate its colonization by fungi. Pests that are associated with specific wood tissues (e.g. bark, outer sapwood) pose virtually no pest risk when the tissues that they inhabit are removed during processing. The pest risk associated with the removed material should be assessed separately if it is to be moved in trade as another commodity (e.g. cork, firewood, bark mulch).	*Category : TECHNICAL* **(317) Chile (30 Sep 2016 10:21 PM)** Delete "industrial processes" because the processes and machinery are so broad, thus the impact on the implementation of the standard is unknow.
86	In general, the greater the level of processing or treatment of the wood after harvest, the greater the reduction in pest risk. However, it should be noted that processing may change the ~~nature of the~~ pest risk. For example, chipping reduces the presence of certain insect pests but increases in surface area of the wood may facilitate its colonization by fungi. Pests that are associated with specific wood	*Category : TECHNICAL* **(300) Brazil (30 Sep 2016 3:35 PM)** For consistency.

	tissues (e.g. bark, outer sapwood) pose virtually no pest risk when the tissues that they inhabit are removed during processing. The pest risk associated with the removed material should be assessed separately if it is to be moved in trade as another commodity (e.g. cork, firewood, bark mulch).	
86	In general, the greater the level of processing or treatment of the wood after harvest, the greater the reduction in pest risk. However, it should be noted that processing may change the ~~nature of the~~ pest risk. For example, chipping reduces the presence of certain insect pests but increases in surface area of the wood may facilitate its colonization by fungi. Pests that are associated with specific wood tissues (e.g. bark, outer sapwood) pose virtually no pest risk when the tissues that they inhabit are removed during processing. The pest risk associated with the removed material should be assessed separately if it is to be moved in trade as another commodity (e.g. cork, firewood, bark mulch).	*Category : TECHNICAL* **(296) Peru (30 Sep 2016 12:18 AM)** for consistency.
86	In general, the greater the level of processing or treatment of the wood after harvest, the greater the reduction in pest risk. However, it should be noted that processing may change the ~~nature of the~~ pest risk. For example, chipping reduces the presence of certain insect pests but increases in surface area of the wood may facilitate its colonization by fungi. Pests that are associated with specific wood tissues (e.g. bark, outer sapwood) pose virtually no pest risk when the tissues that they inhabit are removed during processing. The pest risk associated with the removed material should be assessed separately if it is to be moved in trade as another commodity (e.g. cork, firewood, bark mulch).	*Category : TECHNICAL* **(286) Bolivia (29 Sep 2016 6:12 PM)**
86	In general, the greater the level of processing or treatment of the wood after harvest, the greater the reduction in pest risk. However, it should be noted that processing may change the nature of the pest risk. For example, chipping reduces the presence of certain insect pests but increases in surface area of the wood may facilitate its colonization by fungi. Pests that are associated with specific wood tissues (e.g. bark, outer sapwood) pose virtually no pest risk when the tissues that they inhabit are removed during processing. The pest risk associated with the removed material should be assessed separately if it is to be moved in trade as another commodity (e.g. cork, ~~firewood~~biofuel, bark mulch).	*Category : TECHNICAL* **(266) EPPO (29 Sep 2016 5:51 PM)** Biofuel is more inclusive
86	In general, the greater the level of processing or treatment of the wood after harvest, the greater the reduction in pest risk. However, it should be noted that processing may change the ~~nature of the~~ pest risk. For example, chipping reduces the presence of certain insect pests but increases in surface area of the wood may facilitate its colonization by fungi. Pests that are associated with specific wood tissues (e.g. bark, outer sapwood) pose virtually no pest risk when the tissues that they inhabit are removed during processing. The pest risk associated with the	*Category : TECHNICAL* **(248) Argentina (29 Sep 2016 4:23 AM)** for consistency

	removed material should be assessed separately if it is to be moved in trade as another commodity (e.g. cork, firewood, bark mulch).	
86	In general, the greater the level of processing or treatment of the wood after harvest, the greater the reduction in pest risk. However, it should be noted that processing may change the nature of the pest risk. For example, chipping reduces the presence of certain insect pests but increases in surface area of the wood may facilitate its colonization by fungi. Pests that are associated with specific wood tissues (e.g. bark, outer sapwood) pose virtually no pest risk when the tissues that they inhabit are removed during processing. The pest risk associated with the removed material should be assessed separately if it is to be moved in trade as another commodity (e.g. cork, biofuel, ~~firewood,~~ bark mulch).	*Category : TECHNICAL* **(201) European Union (27 Sep 2016 6:41 PM)** biofuel more inclusive than firewood
86	In general, the greater the level of processing or treatment of the wood after harvest, the greater the reduction in pest risk. However, it should be noted that processing may change the nature of the pest risk. For example, chipping reduces the presence of certain insect pests but increases in surface area of the wood may facilitate its colonization by fungi. Pests that are associated with specific wood tissues ~~(e.g. bark, outer sapwood)~~ pose virtually no pest risk when the tissues that they inhabit are removed during processing. The pest risk associated with the removed material should be assessed separately if it is to be moved in trade as another ~~commodity (e.g~~commodity. ~~cork, firewood, bark mulch).~~	*Category : EDITORIAL* **(110) United States of America (21 Sep 2016 4:42 PM)** Too specific
86	In general, the greater the level of processing or treatment of the wood after harvest, the greater the reduction in pest risk. However, it should be noted that processing may change the ~~nature of the~~ pest risk. For example, chipping reduces the presence of certain insect pests but increases in surface area of the wood may facilitate its colonization by fungi. Pests that are associated with specific wood tissues (e.g. bark, outer sapwood) pose virtually no pest risk when the tissues that they inhabit are removed during processing. The pest risk associated with the removed material should be assessed separately if it is to be moved in trade as another commodity (e.g. cork, firewood, bark mulch).	*Category : TECHNICAL* **(95) Uruguay (20 Sep 2016 3:12 PM)** For consistency
86	In general, the greater the level of processing or treatment of the wood after harvest, the greater the reduction in pest risk. However, it should be noted that processing may change the nature of the pest risk. ~~For example, chipping reduces~~ The pest risks of wood chips may vary with their quality and uniformity. Some pest risks may be reduced when bark is removed and the ~~presence~~ chip size is below 3cm in two dimensions (as described in Table 5). The physical process of ~~certain~~ wood chipping is in itself lethal to some insect ~~pests~~ pests, particularly when a small chip size is produced but increases in surface area of the wood may facilitate its colonization by fungi. Chip size varies according to industry specifications and is usually related to the intended use of the chips. Pests that are associated with	*Category : SUBSTANTIVE* **(90) Australia (20 Sep 2016 12:21 PM)** Clarity on the impact of level of processing on pest risk.

	specific wood tissues (e.g. bark, outer sapwood) pose virtually no pest risk when the tissues that they inhabit are removed during processing. The pest risk associated with the removed material should be assessed separately if it is to be moved in trade as another commodity (e.g. cork, firewood, bark mulch).	
86	In general, the greater the level of processing or treatment of the wood after harvest, the greater the reduction in pest risk. However, it should be noted that processing may change the ~~nature of the~~ pest risk. For example, chipping reduces the presence of certain insect pests but increases in surface area of the wood may facilitate its colonization by fungi. Pests that are associated with specific wood tissues (e.g. bark, outer sapwood) pose virtually no pest risk when the tissues that they inhabit are removed during processing. The pest risk associated with the removed material should be assessed separately if it is to be moved in trade as another commodity (e.g. cork, firewood, bark mulch).	*Category : TECHNICAL* **(23) COSAVE (10 Aug 2016 8:12 PM)** for consistency.
87	The pest groups identified in Table 1 and Table 2 are known to move with wood commodities and have shown the potential to establish in new areas.	*Category : TECHNICAL* **(112) United States of America (21 Sep 2016 4:43 PM)** Suggest moving Tables 1 and 2 to an appendix because they don't add value to the general concept of the standard. They are too specific.
88	**Table 1. Insect groups that may be associated with the international movement of wood**	*Category : SUBSTANTIVE* **(4) China (23 Jul 2016 6:27 AM)** combine tab.1 and tab.2 into one table, which indicate the consistent of the content about pest risk related to wood commodities.
96	Anobiidae, Bostrichidae Cerambycidae, Curculionidae, Buprestidae, Oedemeridae, Platypodinae	*Category : TECHNICAL* **(115) United States of America (21 Sep 2016 4:45 PM)** Suggest adding this Family
96	Anobiidae, ~~Bostrichidae~~ Bostrichidae, Cerambycidae, Curculionidae, Buprestidae, Oedemeridae	*Category : EDITORIAL* **(114) United States of America (21 Sep 2016 4:45 PM)** Grammar fix
96	Anobiidae, Bostrichidae Cerambycidae, Curculionidae, Buprestidae, Oedemeridae, Lygidae	*Category : TECHNICAL* **(20) Indonesia (25 Jul 2016 4:53 AM)**
96	Anobiidae, ~~Bostrichidae~~ Bostrichidae, Cerambycidae, Curculionidae, Buprestidae, Oedemeridae	*Category : EDITORIAL* **(15) Indonesia (25 Jul 2016 3:25 AM)**
98	Cossidae,Lyctidae, Sesiidae Hepialidae	*Category : TECHNICAL* **(3) China (23 Jul 2016 6:25 AM)** Add"Lyctidae", as it's a kind of wood boring beetles.
102	Rhinotermitidae, ~~Kalotermidae~~Kalotermitidae, Termitidae, Formicidae	*Category : SUBSTANTIVE* **(21) Indonesia (25 Jul 2016 4:55 AM)**
103	Non-wood-boring moths and wasps	*Category : TECHNICAL* **(113) United States of America (21 Sep 2016 4:45 PM)** More technically accurate
104	~~Lymantriidae~~Lymantriinae, ~~Lasiocampidae~~ Lasiocampidae, Saturniidae, Tenthredinidae, Diprionidae	*Category : TECHNICAL* **(116) United States of America (21 Sep 2016 4:47 PM)**

		Lymantriinae: This is the correct taxonomy Saturniidae: Due to the risk of moving egg masses of Hylesia spp. Tenthredinidae, Diprionidae: Some species will spin their cocoon on branches and in the cracks of bark and could be easily moved
110	**Pest group** **Laurel wilt**	*Category : TECHNICAL* **(254) Kenya (29 Sep 2016 4:49 PM)**
110	**Pest group**	*Category : TECHNICAL* **(252) Kenya (29 Sep 2016 4:47 PM)** Laurel wilt. Should be added
111	**Examples within the pest group** **Ophiostomataceae**	*Category : TECHNICAL* **(253) Kenya (29 Sep 2016 4:48 PM)** Ophiostomataceae
119	Ophiostomataceae and Ceratocystidaceae	*Category : TECHNICAL* **(188) Viet Nam (26 Sep 2016 10:43 AM)** reference: http://www.fs.fed.us/r3/resources/health/field-guide/sds/bluestain.shtml
121	~~Nectriaceae~~ Nectriaceae, Ceratocystidaceae	*Category : TECHNICAL* **(267) EPPO (29 Sep 2016 5:51 PM)** Ceratocystis spp. and look-alike fungi are very important wilt pathogens that are worth adding.
121	~~Nectriaceae~~ Nectriaceae, Ceratocystidaceae	*Category : TECHNICAL* **(202) European Union (27 Sep 2016 6:41 PM)** Ceratocystis spp. and look-alike fungi are very important wilt pathogens worth mentioning.
124	There are some pest groups ~~such as~~ among water moulds, bacteria, viruses and phytoplasmas that, even if known to be associated with ~~wood which~~ wood, are unlikely to establish in new ~~areas.~~ areas by transfer from imported wood to hosts.	*Category : TECHNICAL* **(268) EPPO (29 Sep 2016 5:51 PM)** This statement seems too general. What we understood as the original intention was to say that for some pests within these pest groups infested wood is not likely to be a pathway for introduction (i.e., those pests are not moved to trees). If the same pest is present on e.g. a plant it could establish in new area.
124	There are some pest ~~groups such as~~ groups among water moulds, bacteria, viruses and phytoplasmas that, even if known to be associated with ~~wood which~~ wood, are unlikely to establish in new ~~areas~~areas by transfer from imported wood to hosts.	*Category : TECHNICAL* **(203) European Union (27 Sep 2016 6:41 PM)** The statement seemed too general. What we understood as the original intention as to say that for some pests within these groups, infested wood is not likely to be a pathway for introduction (i.e. those pests are not moved to trees). If the same pest is present on e.g. a plant it could establish in a new area.
124	There are some pest groups such as water moulds, bacteria, viruses and phytoplasmas known to be associated with wood which are unlikely to establish in new areas.	*Category : TECHNICAL* **(117) United States of America (21 Sep 2016 4:49 PM)** This is not necessarily true for each of these groups. For example water moulds – P. ramorum. Suggest deleting this sentence.
125	**1.1 Solid wood** **Round wood (see ISPM 5) is moved internationally for subsequent processing. Sawn wood (ISPM 5) is moved internationally for use in a wide variety of industrial and commercial applications. Several factors impact the pest risk posed by round wood and sawn wood such as the presence of bark, moisture content of the wood, and thickness of the**	*Category : SUBSTANTIVE* **(118) United States of America (21 Sep 2016 4:50 PM)** This section is very repetitive. We summarized in the below paragraph sections for Round wood and sawn wood into a section on solid wood.

	wood. Removal of bark reduces the risk posed by certain pests, and is discussed in greater detail in "Section 2. Phytosanitary Measures" of this standard. Reduction in the moisture content of wood also reduces the risk posed by certain pests. Finally, the thickness of a piece of wood also impacts its relative pest risk; thinner pieces of wood pose a lower risk than thicker pieces of wood because they provide less physical substrate to sustain and conceal pests.	
126	~~Most round wood, with or without bark, is moved internationally for subsequent processing at destination. The wood may be sawn for use as construction material (e.g. as timber framing) or it may be used to produce wood materials (e.g. wood chips, bark chips, pulp, firewood, biofuels and manufactured wood products).~~	*Category : SUBSTANTIVE* **(119) United States of America (21 Sep 2016 4:50 PM)** See US comment in paragraph 125
126	Most round wood, with or without bark, is moved internationally for subsequent processing at destination. The wood may be sawn for use as construction material (e.g. as timber framing) or it may be used to produce wood materials (e.g. wood chips, wood wool, bark chips, pulp, firewood, biofuels and manufactured wood products).	*Category : EDITORIAL* **(16) Indonesia (25 Jul 2016 3:28 AM)**
127	~~Removing bark from round wood reduces the probability of introduction and spread of some quarantine pests. The level of reduction depends on the degree to which the bark and underlying wood have been removed and on the pest group. For example, complete bark removal (i.e. to produce bark-free wood) will greatly reduce the risk of infestation of most bark beetles in the wood. However, bark removal is unlikely to influence the incidence of deep wood borers, some species of fungi and wood-inhabiting nematodes.~~	*Category : SUBSTANTIVE* **(120) United States of America (21 Sep 2016 4:51 PM)** See US comment in paragraph 125
127	Removing bark from round wood reduces the probability of introduction and spread of some quarantine pests. The level of reduction depends on the degree to which the bark and underlying wood have been removed and on the pest group. For example, complete bark removal ~~(i.e. to produce bark-free wood)~~ will greatly reduce the risk of infestation of most bark beetles in the wood. However, bark removal is unlikely to influence the incidence of deep wood borers, some species of fungi and wood-inhabiting nematodes.	*Category : EDITORIAL* **(87) Australia (20 Sep 2016 9:50 AM)** Repetitive
128	~~The pest risk of round wood is greatly influenced by the total amount of remaining bark on the debarked wood which in turn is greatly influenced by the shape of the round wood, the machinery used to remove the bark and to a lesser extent, by the species of tree. In particular, the widened areas at the base of a tree, especially where large root buttresses are present, and around branch nodes are preferred locations for beetle infestation and oviposition.~~	*Category : SUBSTANTIVE* **(121) United States of America (21 Sep 2016 4:51 PM)** See US comment in paragraph 125

129	~~Pest groups likely to be associated with round wood are listed in Table 3.~~	*Category : TECHNICAL* **(122) United States of America (21 Sep 2016 4:51 PM)** Suggest to delete tables 3 and 4 because they don't bring value. Reiterate the pest groups in Tables 1 and 2. And the pest groups not in column 1 goes in column 2. Much of the information is misleading.
130	~~**Table 3. Pest groups likely to be associated with round wood**~~	*Category : TECHNICAL* **(123) United States of America (21 Sep 2016 4:52 PM)** See US comment in paragraph 130
132	~~Pest groups~~ **likely to be associated** ~~with round wood~~	*Category : EDITORIAL* **(225) Philippines (28 Sep 2016 5:16 AM)** redundant
132	**Pest groups likely to be associated with round wood**	*Category : SUBSTANTIVE* **(73) South Africa (16 Sep 2016 11:19 AM)** with high probability
133	~~Pest groups~~ **less likely to be associated** ~~with round wood~~	*Category : EDITORIAL* **(226) Philippines (28 Sep 2016 5:17 AM)** redundant
133	**Pest groups less likely to be associated with round wood**	*Category : SUBSTANTIVE* **(72) South Africa (16 Sep 2016 11:18 AM)** • Addition of the wordings "with high probability" and "with low to negligible probability" to provide clarity on risk ratings in terms of ISPM 11 (2004). Pest Risk Analysis for quarantine pests, including analysis of environmental risks and living modified organisms. • Addition of the wording "mites" on the first column of table 1. Reason being that mites can be transported on wood products and on insects infesting wood. It is not so much that the mites are pests of wood but that alien invasive mites could be introduced via wood products.
135	Bark beetles, wood flies, wood-boring beetles, wood-boring moths, wood wasps, termites and carpenter ants, non-wood-boring moths, aphids and adelgids, scales, rust fungi, pathogenic decay fungi, canker fungi, pathogenic stain fungi, vascular wilt fungi, nematodes	*Category : SUBSTANTIVE* **(74) South Africa (16 Sep 2016 11:20 AM)** and mites
139	Bark beetles[1], non-wood-boring moths, aphids and adelgids, scales, rust fungi	*Category : TECHNICAL* **(5) China (23 Jul 2016 6:28 AM)** On round wood without bark, the non-wood-boring moths probably have high risk, for example invasive pest Lymantria dispar may lay eggs on it.
141	~~[Footnote 1] Some bark beetles have life stages that are found in the wood below the surface of the bark and cambium and, therefore, may be present after debarking or complete bark removal.~~	*Category : SUBSTANTIVE* **(124) United States of America (21 Sep 2016 4:53 PM)** See US comment in paragraph 130
142	**1.2 Sawn ~~wood~~ timber**	*Category : EDITORIAL* **(189) Korea, Republic of (27 Sep 2016 1:20 PM)** Propose to change from sawn wood to "sawn timber"
142	~~**1.2 Sawn wood**~~	*Category : TECHNICAL* **(125) United States of America (21 Sep 2016 4:55 PM)** See US comment on paragraph 125
143	~~Most sawn wood, with or without bark, is moved internationally for use in building construction, in the manufacture of furniture, and for the production of wood packaging material, wood lathing, wood stickers, wood spacers, railway sleepers (ties) and other constructed wood products. Sawn wood may include fully squared~~	*Category : TECHNICAL* **(126) United States of America (21 Sep 2016 4:55 PM)** See US comment on paragraph 125

	~~pieces of wood without bark or partially squared wood with one or more curved edges that may or may not include bark. The thickness of the piece of sawn wood may affect the pest risk.~~	
144	Sawn wood from which some or all bark has been removed presents a much lower pest risk than sawn wood with bark. The pest risk of bark-related organisms is generally lower the smaller the bark ~~piece~~ pieces remaining on the wood.	*Category : EDITORIAL* **(269) EPPO (29 Sep 2016 5:51 PM)** Better English
144	Sawn wood from which some or all bark has been removed presents a much lower pest risk than sawn wood with bark. The pest risk of bark-related organisms is generally lower the smaller the bark ~~piece~~ pieces remaining on the wood.	*Category : EDITORIAL* **(204) European Union (27 Sep 2016 6:42 PM)** better English
144	~~Sawn wood from which some or all bark has been removed presents a much lower pest risk than sawn wood with bark. The pest risk of bark-related organisms is generally lower the smaller the bark piece remaining on the wood.~~	*Category : TECHNICAL* **(127) United States of America (21 Sep 2016 4:55 PM)** See US comment on paragraph 125
145	~~The pest risk of bark-related organisms is also dependent on the moisture content of the wood. Wood from freshly harvested living trees has a high moisture content that decreases over time to ambient moisture conditions, which are less likely to allow bark-related organisms to survive. Further information on addressing pest risks through a combination of treatment and moisture reduction is provided in Appendix 2.~~	*Category : TECHNICAL* **(128) United States of America (21 Sep 2016 4:56 PM)** See US comment on paragraph 125
146	~~Pest groups likely to be associated with sawn wood are listed in Table 4.~~	*Category : TECHNICAL* **(129) United States of America (21 Sep 2016 4:56 PM)** See US comment on paragraph 129
147	~~**Table 4. Pest groups likely to be associated with sawn wood**~~	*Category : TECHNICAL* **(130) United States of America (21 Sep 2016 4:57 PM)** See US comment on paragraph 129
149	~~**Pest groups**~~ **likely to be associated** ~~**with sawn wood**~~	*Category : EDITORIAL* **(227) Philippines (28 Sep 2016 5:17 AM)** redundant
150	~~**Pest groups**~~ **less likely to be associated** ~~**with sawn wood**~~	*Category : EDITORIAL* **(228) Philippines (28 Sep 2016 5:18 AM)** redundant
153	Non-wood-boring moths, aphids and adelgids, scales[3]	*Category : TECHNICAL* **(6) China (23 Jul 2016 6:29 AM)** On round wood without bark, the non-wood-boring moths probably have high risk, for example invasive pest Lymantria dispar may lay eggs on it.
156	Bark beetles, non-wood-boring moths, aphids and adelgids, scales[3], rust fungi	*Category : TECHNICAL* **(7) China (23 Jul 2016 6:29 AM)** On sawn wood without bark, the non-wood-boring moths probably have high risk, for example invasive pest Lymantria dispar may lay eggs on it.
157	~~[Footnote 2] Although pathogenic decay fungi may be present in sawn wood, most present a low pest risk because of the intended use of the wood and the limited potential for the fungi to produce spores on the wood.~~	*Category : TECHNICAL* **(131) United States of America (21 Sep 2016 4:57 PM)** See US comment on paragraph 129

157	[Footnote 2] Although pathogenic decay fungi may be present in sawn wood, most present a low ~~pest~~ risk of establishment because of the intended use of the wood and the limited potential for the fungi to produce spores on the wood.	*Category : TECHNICAL* **(88) Australia (20 Sep 2016 9:52 AM)** The pest may be introduced but has a low risk of establishment.
158	~~[Footnote 3] Many species are removed during the squaring of wood, but remaining bark may present sufficient surface area for some species to survive after sawing.~~	*Category : TECHNICAL* **(132) United States of America (21 Sep 2016 4:57 PM)** See US comment on paragraph 129
159	**1.~~3~~2 M~~Wood materials produced from mechanical processing of~~ echanically processed wood ~~(excluding sawing)~~**	*Category : TECHNICAL* **(133) United States of America (21 Sep 2016 4:58 PM)** Renumbered and retitled based on reorganization of draft from US comments in paragraphs 125-158
160	Mechanical processes that reduce the size of wood pieces generally reduce the pest ~~risk (e.g~~risk~~. wood chips) or render the wood pieces free from pests (e.g. sawdust, wood wool).~~	*Category : TECHNICAL* **(270) EPPO (29 Sep 2016 5:51 PM)** Current text not in line with 1.3.3. [169]. Furthermore, the chapeau does not need to summarize conclusions from sub-sections, so easier to delete rather than amend.
160	Mechanical processes that reduce the size of wood pieces generally reduce the pest risk ~~(e.g. wood chips) or render the wood pieces free from pests (e.g. sawdust, wood wool).~~	*Category : TECHNICAL* **(205) European Union (27 Sep 2016 6:42 PM)** Original text not in line with 1.3.3 [169]. Furthermore, the chapeau need not summarize conclusions from subsections, therefore easier to delete than amend.
160	~~Mechanical processes that reduce the size of~~ For some organisms, minimizing wood ~~pieces~~ size could reduce the ~~pest~~ risk ~~(e.g. wood chips) or render the wood pieces free from pests (e.g. sawdust~~in commodity; however, ~~wood wool)~~for others, other risk management measures are necessary.	*Category : TECHNICAL* **(134) United States of America (21 Sep 2016 5:00 PM)** More appropriate language
161	~~**1.3.1 Wood chips**~~	*Category : TECHNICAL* **(135) United States of America (21 Sep 2016 5:01 PM)** Should continue with the above section. It is not necessary to subdivide this into subsections.
162	~~The~~ In addition to pest risk factors mentioned in Section 1 and pertaining to wood in general, the pest risk of wood chips varies with their size and uniformity, and also with their method of storage. Pest risk is reduced when bark is removed and the chip size is below 3 cm in at least two dimensions (as described in Table ~~4~~5 and section 2.3). The physical process of wood chipping is in itself lethal to some insect pests, particularly when a small chip size is produced. Chip size varies according to industry specifications and is usually related to the intended use of the chips (e.g. biofuel, paper production, horticulture, animal bedding, etc.). Some wood chips are produced in accordance with strict quality standards to minimize bark and fines (very small particles).	*Category : TECHNICAL* **(271) EPPO (29 Sep 2016 5:51 PM)** Correction of an error (number of the Table) and a full stop missing (at the end of the paragraph). Risk factors for Wood chips is as for wood in general plus additional factors. 'At least' is consistent with wording of sect. 2.3
162	~~The~~ In addition to pest risk factors mentioned in Section 1 and pertaining to wood in general, the pest risk of wood chips varies with their size and uniformity, and also with their method of storage. Pest risk is reduced when bark is removed and the chip size is below 3 cm in two dimensions (as described in ~~Table 4~~ Table 5 and section 2.3). The physical process of wood chipping is in itself lethal to some insect pests, particularly when a small chip size is produced. Chip size varies according to industry specifications and is usually related to the intended use of the chips (e.g.	*Category : TECHNICAL* **(206) European Union (27 Sep 2016 6:42 PM)** Risk factors for wood chips are as for wood in general plus additional factors. At least' is consistent with section 2.3. Editorial change of erratic table number

	biofuel, paper production, horticulture, animal bedding, etc.). Some wood chips are produced in accordance with strict quality standards to minimize bark and fines (very small particles)	
162	The pest risk of wood chips varies with their size and uniformity, and also with their method of storage. Pest risk is reduced when bark is removed and the chip size is below ~~3~~ 1.5 cm in two dimensions (as described in Table 4 and section 2.3). The physical process of wood chipping is in itself lethal to some insect pests, particularly when a small chip size is produced. Chip size varies according to industry specifications and is usually related to the intended use of the chips (e.g. biofuel, paper production, horticulture, animal bedding, etc.). Some wood chips are produced in accordance with strict quality standards to minimize bark and fines (very small particles)	*Category : TECHNICAL* **(190) Korea, Republic of (27 Sep 2016 1:30 PM)** In Korea, it is required that wood chip size should be below 1.5 cm in order to reduce the pest risk from nematode (Bursaphelenchus xylophilus). Therefore, the scientific evidence should be provided regarding "wood chip size below 3 cm".
162	The pest risk of wood chips varies with their size and uniformity, ~~and also~~ as well as with their method of storage. ~~Pest risk is reduced when bark is removed and the chip size is below 3 cm in two dimensions (as described in Table 4 and section 2.3). The physical process of wood chipping is in itself lethal to some insect pests, particularly when a small chip size is produced.~~ Chip size and quality varies according to industry specifications and is ~~usually~~ related to the intended use of the ~~chips (e~~chips~~.g. biofuel, paper production, horticulture, animal bedding, etc.). Some wood chips are produced in accordance with strict quality standards to minimize bark and fines (very small particles)~~	*Category : EDITORIAL* **(136) United States of America (21 Sep 2016 5:02 PM)** Examples should not be in the standard.
162	The pest risk of wood chips varies with their size and uniformity, and also with their method of storage. Pest risk is reduced when bark is removed and the chip size is below 3 cm in two dimensions (as described in ~~Table 4~~ Table 5 and section 2.3). The physical process of wood chipping is in itself lethal to some insect pests, particularly when a small chip size is produced. Chip size varies according to industry specifications and is usually related to the intended use of the chips (e.g. biofuel, paper production, horticulture, animal bedding, etc.). Some wood chips are produced in accordance with strict quality standards to minimize bark and fines (very small particles)	*Category : EDITORIAL* **(29) Thailand (30 Aug 2016 12:13 PM)** The number of table that referred in a blanket of first sentence should be amend to be table 5.
163	~~Wood chipping also provides conditions conducive for certain insect survival. Some insects are attracted to the chemicals given off by cut wood and may therefore infest freshly cut wood chips.~~	*Category : TECHNICAL* **(137) United States of America (21 Sep 2016 5:03 PM)** Not needed, too specific
164	Depending on size, insect pests ~~normally be~~ normally found under the bark may be present in wood chips with bark. Many species of pathogenic decay fungi, canker fungi and nematodes may also be present in wood chips with or without bark. Spore dispersal of wood-inhabiting rust fungi would be very unlikely after the production of chips.	*Category : EDITORIAL* **(272) EPPO (29 Sep 2016 5:51 PM)** Unnecessary work

164	Depending on size, insect pests normally be found under the bark may be present in wood chips with bark. Many species of pathogenic decay fungi, canker fungi and ~~nematodes~~ may also be present in wood chips with or without bark. Spore dispersal of wood-inhabiting rust fungi would be very unlikely after the production of chips.	*Category : SUBSTANTIVE* **(229) Philippines (28 Sep 2016 5:22 AM)** do we really need to impose phytosanitary measures against nematode on chipped wood?
164	Depending on size, insect pests normally ~~be~~ found under the bark may be present in wood chips with bark. Many species of pathogenic decay fungi, canker fungi and nematodes may also be present in wood chips with or without bark. Spore dispersal of wood-inhabiting rust fungi would be very unlikely after the production of chips.	*Category : EDITORIAL* **(222) New Zealand (27 Sep 2016 10:19 PM)** unnecessary word
164	Depending on size, insect pests ~~normally be~~ normally found under the bark may be present in wood chips with bark. Many species of pathogenic decay fungi, canker fungi and nematodes may also be present in wood chips with or without bark. Spore dispersal of wood-inhabiting rust fungi would be very unlikely after the production of chips.	*Category : EDITORIAL* **(207) European Union (27 Sep 2016 6:42 PM)** superfluous word
164	~~Depending on size, insect pests normally be found under the bark may be present in wood chips with bark. Many species of pathogenic decay fungi, canker fungi and nematodes may also be present in wood chips with or without bark. Spore dispersal of wood-inhabiting rust fungi would be very unlikely after the production of chips.~~	*Category : EDITORIAL* **(138) United States of America (21 Sep 2016 5:04 PM)** Not necessary, too specific
165	~~**1.3.2 Wood residue**~~	*Category : EDITORIAL* **(139) United States of America (21 Sep 2016 5:04 PM)** See US comment on paragraph 161
166	Wood residue is normally considered to present a high pest risk because it varies greatly in size and may or may not include bark. Wood residue is generally a waste by-product of wood being mechanically processed during production of a desired article; nevertheless, wood residue may be moved as a commodity. Of all types of wood residue, sawdust presents the lowest pest risk.	*Category : TECHNICAL* **(140) United States of America (21 Sep 2016 5:05 PM)** To provide guidance.
167	Pest groups likely to be associated with mechanically processed wood ~~chips and wood residue~~ are listed in Table ~~5~~5 (Appendix X).	*Category : TECHNICAL* **(141) United States of America (21 Sep 2016 5:06 PM)** Move Table 5 to an Appendix
168	**Table 5. Pest groups likely to be associated with wood chips and wood residue**	*Category : TECHNICAL* **(142) United States of America (21 Sep 2016 5:07 PM)** See US comment on paragraph 167 - move to an Appendix
170	~~Pest groups~~ **likely to be associated** ~~with wood chips and wood residue~~	*Category : EDITORIAL* **(230) Philippines (28 Sep 2016 5:23 AM)** redundant
171	~~Pest groups~~ **less likely to be associated** ~~with wood chips and wood residue~~	*Category : EDITORIAL* **(231) Philippines (28 Sep 2016 5:24 AM)** redundant
172	Wood chips with bark and greater than 3 cm in at least two dimensions	*Category : TECHNICAL* **(273) EPPO (29 Sep 2016 5:51 PM)**

		'At least' is consistent with wording of sect. 2.3 Change also in paras 175, 178, 181
172	Wood chips with bark and greater than 3 cm in at least two dimensions	*Category : TECHNICAL* **(208) European Union (27 Sep 2016 6:42 PM)** 'At least' consistent with sect. 2.3. Change also paras 175, 178, 181
173	Bark beetles, wood flies, wood-boring beetles, wood-boring moths, wood wasps, termites and carpenter ants, rust fungi[4], pathogenic decay fungi[4], canker fungi, pathogenic stain fungi, vascular wilt fungi, nematodes	*Category : TECHNICAL* **(71) South Africa (16 Sep 2016 11:13 AM)** • Addition of "Aphididae" because it is also one of the pest group of wood. • • Addition of "Brevipalpidae" and "Tetranychidae" due to fact that these are pest groups that are related to mites and can be pests of wood.
173	Bark beetles, wood flies, wood-boring beetles, wood-boring moths, wood wasps, termites and carpenter ants, rust fungi[4], pathogenic decay fungi[4], canker fungi, pathogenic stain fungi, vascular wilt fungi, nematodes	*Category : TECHNICAL* **(70) South Africa (16 Sep 2016 11:12 AM)** • Addition of "and mites" on the first column of table 1. Reason being that mites can be transported on wood products and on insects infesting wood. It is not so much that the mites are pests of wood but that alien invasive mites could be introduced via wood products.
173	Bark beetles, wood flies, wood-boring beetles, wood-boring moths, wood wasps, termites and carpenter ants, rust fungi[4], pathogenic decay fungi[4], canker fungi, pathogenic stain fungi, vascular wilt fungi, nematodes	*Category : TECHNICAL* **(69) South Africa (16 Sep 2016 11:11 AM)** Addition of "Sesiidae and Hepialidae" due to fact that these are also other pest groups that are related to wood.
173	Bark beetles, wood flies, wood-boring beetles, wood-boring moths, wood wasps, termites and carpenter ants, rust fungi[4], pathogenic decay fungi[4], canker fungi, pathogenic stain fungi, vascular wilt fungi, nematodes	*Category : TECHNICAL* **(68) South Africa (16 Sep 2016 11:10 AM)** • Addition of "and Ambrosia" due to fact that it's also a quarantine pest and also a vector for some fungi.
174	Non-wood-boring moths, aphids and adelgids, scales	*Category : TECHNICAL* **(8) China (23 Jul 2016 6:30 AM)** On wood chips with bark and greater than 3 cm in two dimensions, those pests（Non-wood-boring moths, aphids and adelgids, scales） may be alive, so the risks are still high, which should be transferred to Para.173.
177	Bark beetles, non-wood-boring moths, aphids and adelgids, scales, rust fungi[4]	*Category : TECHNICAL* **(9) China (23 Jul 2016 6:31 AM)** On wood chips without bark and greater than 3 cm in two dimensions, Non-wood-boring moths still have high risk, for example the eggs of invasive pest Lymantria dispar, which should be transferred to Para.176.
180	Wood-boring beetles, non-wood-boring moths, aphids and adelgids, scales, wood flies, wood-boring moths, wood wasps	*Category : TECHNICAL* **(10) China (23 Jul 2016 6:31 AM)** On wood chips with bark and less than 3 cm in two dimensions, Wood-boring beetles（Buprestidae、Anobiidae、Bostrichidae）、scales aphids and adelgids can keep alive and have high risk, which should be transferred to Para.179.
183	Bark beetles, non-wood-boring moths, aphids and adelgids, scales, wood flies, wood-boring beetles, wood-boring moths, wood wasps, rust fungi[4]	*Category : TECHNICAL* **(11) China (23 Jul 2016 6:31 AM)** On wood chips without bark and less than 3 cm in two dimensions, Wood-boring

		beetles（Buprestidae、Anobiidae、Bostrichidae）can keep alive and have high risk, which should be transferred to Para.182.
184	Wood residue with or without bark	*Category : SUBSTANTIVE* **(12) China (23 Jul 2016 6:32 AM)** Wood residue with or without bark should be discussed separately as different pests.
185	Bark beetles, wood flies, wood-boring beetles, wood-boring moths, wood wasps, termites and carpenter ants, non-wood-boring moths, aphids and adelgids, scales, rust fungi[4], pathogenic decay fungi[4], canker fungi, pathogenic stain fungi, vascular wilt fungi, ~~nematodes~~ nematode, viruses, bacteria, mycoplasma and Lyctidae	*Category : TECHNICAL* **(13) China (23 Jul 2016 6:33 AM)** Add viruses, bacteria, mycoplasma and Lyctidae in this paragraph.
187	[Footnote 4] Rust and pathogenic decay fungi may be present in consignments of wood chips or wood residue but are unlikely to ~~present a **risk** for establishment~~ establish or spread.	*Category : TECHNICAL* **(274) EPPO (29 Sep 2016 5:51 PM)** For consistency with Glossary definitions, that do not refer to 'risk of establishment or spread', but likelihood thereof.
187	[Footnote 4] Rust and pathogenic decay fungi may be present in consignments of wood chips or wood residue but are unlikely to ~~present a **risk** for establishment~~ establish or spread.	*Category : TECHNICAL* **(209) European Union (27 Sep 2016 6:42 PM)** Consistent with Glossary definitions, that do not refer to 'risk of establishment' but the likelihood thereof.
187	[Footnote 4] Rust and pathogenic decay fungi may be present in consignments of wood chips or wood residue but are unlikely to present a **risk** for establishment or spread.	*Category : TECHNICAL* **(143) United States of America (21 Sep 2016 5:08 PM)** Move with Table 5 to the Appendix
188	~~**1.3.3 Sawdust and wood wool**~~	*Category : TECHNICAL* **(144) United States of America (21 Sep 2016 5:09 PM)** Incorporated into paragraph 166. See US comment on paragraph 166.
189	~~Sawdust presents a lower pest risk. Only in certain cases may fungi and nematodes be associated with sawdust. Wood wool is considered to present a similar pest risk.~~	*Category : TECHNICAL* **(145) United States of America (21 Sep 2016 5:09 PM)** Incorporated into paragraph 166. See US comment on paragraph 166.
189	~~Sawdust presents a lower pest risk. Only in certain cases may fungi and nematodes be associated with sawdust. Wood wool is considered to present a similar pest risk.~~ Sawdust carries risk of infestation with pests due to contamination from soil, plant material, animal residues and/or seeds during packaging. In certain cases fungi and nematodes may be associated with sawdust. Wood wool is considered to present a relatively low pest risk. **1.3.4** Plywood and laminated veneer lumber (LVL) Plywood and LVL is a processed wood product that attracts timber pests when stored in an environment that favours them. Plywood and substrates used for veneers have the capacity to absorb moisture and this may encourage infestation by pests. Commonly used urea formaldehyde based glues used during manufacturing plywood last for up to 3 months, giving adequate protection from reinfestation. Additionally, individual thickness of most hardwood veneer are usually <1mm which is not suitable for most insects to complete their life cycle. Cottage plywood made using organic glues present a greater biosecurity risk	*Category : SUBSTANTIVE* **(91) Australia (20 Sep 2016 12:26 PM)** To elaborate risk of contamination in sawdust. New section 1.3.4 to include plywood veneer
190	**2. ~~Phytosanitary~~ Official Measures**	*Category : SUBSTANTIVE* **(232) Philippines (28 Sep 2016 5:27 AM)** To be consistent with our proposed terminology on ispm 5. That official measures

		refers to measures used to address not only quarantine pest but also regulated non-quarantine pest.
191	The phytosanitary measures described in this standard should be required only if technically justified, based on PRA. Certain phytosanitary measures may be implemented to protect wood that has been produced in pest free areas but that may be at risk of ~~subsequent~~ infestation (e.g. during storage and transportation). Various safeguarding methods to prevent infestation after the application of a measure should be considered.	*Category : EDITORIAL* **(146) United States of America (21 Sep 2016 5:10 PM)** Moved from paragraph 194 for better transition
192	The NPPO of the importing country may require limitations on the time frame for import. ~~For example, the~~ The pest risk associated with round wood moved in trade may be managed by the NPPO specifying a certain time in which dispatch or import of a consignment may occur (e.g. during a time when a pest is inactive).	*Category : EDITORIAL* **(318) Chile (30 Sep 2016 10:23 PM)**
192	The NPPO of the importing country may require limitations on the time frame for import. For example, the pest risk associated with round wood moved in trade may be managed by the NPPO of the importing country specifying a certain time in which dispatch or import of a consignment may occur (e.g. during a time when a pest is inactive).	*Category : TECHNICAL* **(310) Canada (30 Sep 2016 8:09 PM)** Clarifying that the NPPO of the importing country sets the requirements based on pest activity at origin.
192	The NPPO of the importing country may require limitations on the time frame for import. ~~For example, the~~ The pest risk associated with round wood moved in trade may be managed by the NPPO specifying a certain time in which dispatch or import of a consignment may occur (e.g. during a time when a pest is inactive).	*Category : EDITORIAL* **(301) Brazil (30 Sep 2016 3:36 PM)** Better reading.
192	The NPPO of the importing country may require limitations on the time frame for import. ~~For example, the~~ The pest risk associated with round wood moved in trade may be managed by the NPPO specifying a certain time in which dispatch or import of a consignment may occur (e.g. during a time when a pest is inactive).	*Category : EDITORIAL* **(297) Peru (30 Sep 2016 12:19 AM)** Better reading.
192	The NPPO of the importing country may require limitations on the time frame for import. ~~For example, the~~ The pest risk associated with round wood moved in trade may be managed by the NPPO specifying a certain time in which dispatch or import of a consignment may occur (e.g. during a time when a pest is inactive).	*Category : EDITORIAL* **(287) Bolivia (29 Sep 2016 6:18 PM)**
192	The NPPO of the importing country may require limitations on the time frame for import. ~~For example, the~~ The pest risk associated with round wood moved in trade may be managed by the NPPO specifying a certain time in which dispatch or import of a consignment may occur (e.g. during a time when a pest is inactive).	*Category : EDITORIAL* **(249) Argentina (29 Sep 2016 4:24 AM)** Better reading
192	The NPPO of the importing country may require limitations on the time frame for import. For example, the pest risk associated with round wood moved in trade may be managed by the NPPO specifying a certain time in which dispatch or import of a consignment may occur (e.g. during a time when a pest is inactive).	*Category : SUBSTANTIVE* **(233) Philippines (28 Sep 2016 5:35 AM)** provide table indicating specific wood (process) material, time allowed for storage after treatment and time allowed for re-use

192	~~The NPPO of the importing country may require limitations on the time frame for import. For example, the pest risk associated with round wood moved in trade may be managed by the NPPO specifying a certain time in which dispatch or import of a consignment may occur (e.g. during a time when a pest is inactive).~~	*Category : SUBSTANTIVE* **(191) Korea, Republic of (27 Sep 2016 1:35 PM)** Propose to delete the paragraph 192. It is not applied for real situation regarding transportation in long distance and climate changes.
192	The NPPO of the importing country may require limitations on the time frame for ~~import. For example, the pest risk associated with round wood moved in trade may be managed by the NPPO specifying a certain time in which dispatch or~~ import ~~of a consignment may occur (e~~(i.ge. during a time when a pest is ~~inactive)~~inactive or a PRA area of the exporting country is not conducive to a pests' development).	*Category : EDITORIAL* **(147) United States of America (21 Sep 2016 5:12 PM)** For clarity
192	The NPPO of the importing country may require limitations on the time frame for import. ~~For example, the~~ The pest risk associated with round wood moved in trade may be managed by the NPPO specifying a certain time in which dispatch or import of a consignment may occur (e.g. during a time when a pest is inactive).	*Category : EDITORIAL* **(96) Uruguay (20 Sep 2016 3:13 PM)** Better reading
192	The NPPO of the importing country may require limitations on the time frame for import. ~~For example, the~~ The pest risk associated with round wood moved in trade may be managed by the NPPO specifying a certain time in which dispatch or import of a consignment may occur (e.g. during a time when a pest is inactive).	*Category : EDITORIAL* **(24) COSAVE (10 Aug 2016 8:17 PM)** Better reading.
193	~~The NPPO of the importing country may require and monitor the application of specific methods of processing, handling and appropriate disposal of waste that reduce the pest risk from the wood after import.~~	*Category : TECHNICAL* **(319) Chile (30 Sep 2016 10:23 PM)** This procedures in the importing country are not issues to be armoniced in an ISPM. This paragraph would be appropiate in other type of document, like a manual.
193	~~The NPPO of the importing country may require and monitor the application of specific methods of processing, handling and appropriate disposal of waste that reduce the pest risk from the wood after import.~~	*Category : TECHNICAL* **(302) Brazil (30 Sep 2016 3:37 PM)** This procedures in the importing country are not issues to be armoniced in an ISPM. This paragraph would be appropiate in other type of document, like a manual.
193	~~The NPPO of the importing country may require and monitor the application of specific methods of processing, handling and appropriate disposal of waste that reduce the pest risk from the wood after import.~~	*Category : TECHNICAL* **(298) Peru (30 Sep 2016 12:19 AM)** This procedures in the importing country are not issues to be armoniced in an ISPM. This paragraph would be appropiate in other type of document, like a manual.
193	~~The NPPO of the importing country may require and monitor the application of specific methods of processing, handling and appropriate disposal of waste that reduce the pest risk from the wood after import.~~	*Category : TECHNICAL* **(288) Bolivia (29 Sep 2016 6:23 PM)** This procedures in the importing country are not issues to be armoniced in an ISPM. This paragraph would be appropiate in the pther type of document, like a manual.
193	~~The NPPO of the importing country may require and monitor the application of specific methods of processing, handling and appropriate disposal of waste that reduce the pest risk from the wood after import.~~	*Category : TECHNICAL* **(250) Argentina (29 Sep 2016 4:26 AM)** This procedures in the importing country are not issues to be armoniced in an ISPM. This paragraph would be appropiate in other type of document, like a manual.
193	~~The~~ After importation, the NPPO of the importing country may ~~require and~~ need to monitor the application of specific methods of processing, handling and appropriate disposal of waste that reduce the ~~pest~~ risk of pest introduction and spread from the ~~wood after import~~wood.	*Category : EDITORIAL* **(148) United States of America (21 Sep 2016 5:13 PM)** Clarify the meaning of this paragraph. Not clear who is doing what, when and where.

193	~~The NPPO of the importing country may require and monitor the application of specific methods of processing, handling and appropriate disposal of waste that reduce the pest risk from the wood after import.~~	*Category : TECHNICAL* **(97) Uruguay (20 Sep 2016 3:16 PM)** These procedures in the importing country are not issues to be harmonized in an ISPM. This paragraph would be appropriate in another type of document like a manual
193	The NPPO of the importing country may require and monitor the application of specific methods of processing, handling and appropriate disposal of waste that reduce the pest risk from the wood after import.	*Category : SUBSTANTIVE* **(75) South Africa (16 Sep 2016 11:21 AM)** • Deletion of the word "monitoring" in order to provide contextual clarification and to highlight obligations of the NPPO in terms of the IPPC new revised text of 1997, Article IV.
193	~~The NPPO of the importing country may require and monitor the application of specific methods of processing, handling and appropriate disposal of waste that reduce the pest risk from the wood after import.~~	*Category : TECHNICAL* **(25) COSAVE (10 Aug 2016 8:22 PM)** This procedures in the importing country are not issues to be armoniced in an ISPM. This paragraph would be appropiate in other type of document, like a manual.
194	~~The application of the phytosanitary measures listed below, may not prevent subsequent infestation by pests prior to dispatch., Various methods to prevent infestation after the application of a measure should be considered; for example, covering wood with tarpaulin for storage or using an enclosed conveyance.~~	*Category : EDITORIAL* **(149) United States of America (21 Sep 2016 5:13 PM)** Much of this paragraph is redundant with paragraph 191
194	The application of the phytosanitary measures listed below, may not prevent subsequent infestation by pests prior to dispatch~~.~~, . Various methods to prevent infestation after the application of a measure should be considered; for example, covering wood with tarpaulin for storage or using an enclosed conveyance.	*Category : EDITORIAL* **(31) Thailand (30 Aug 2016 12:15 PM)**
195	~~The~~ If required with the phytosanitary import requirements of the importing country, the NPPO of the exporting country ~~or importing country~~ should verify the application and the effectiveness of phytosanitary measures before export ~~or at the point of entry, respectively,~~ in accordance with ISPM ~~20 (Guidelines for a phytosanitary import regulatory system), ISPM~~ 23 (Guidelines for inspection) and ISPM 31 (Methodologies for sampling of consignments).	*Category : SUBSTANTIVE* **(275) EPPO (29 Sep 2016 5:51 PM)** The obligation ('should') to verify is only relevant if necessary to ensure compliance with the phytosanitary import requirements. It is entirely up to the importing country's discretion whether it wishes to verify or not, - so ISPMs do not in such cases state 'should' obligations for the importing country.
195	~~The~~ If included in the phytosanitary import requirements of the importing country, the NPPO of the exporting country ~~or importing country~~ should verify the application and the effectiveness of phytosanitary measures before ~~export or at the point of entry~~export, ~~respectively,~~ in accordance ~~with~~ with ISPM ~~20 (Guidelines for a phytosanitary import regulatory system), ISPM~~ 23 (Guidelines for inspection) and ISPM 31 (Methodologies for sampling of consignments).	*Category : SUBSTANTIVE* **(210) European Union (27 Sep 2016 6:42 PM)** The obligation ('should') to verify is only relevant if necessary to ensure compliance with the phytosanitary import requirements. It is entirely up to the importing country's discretion whether it wishes to verify or not at import, - so ISPMs do not in such cases state 'should'-obligations for importing countries.
195	The NPPO of the exporting country or importing country should verify the application and the effectiveness of phytosanitary measures before export or at the point of entry, ~~respectively,~~ in accordance with ISPM 20 (Guidelines for a phytosanitary import regulatory system), ISPM 23 (Guidelines for inspection) and ISPM 31 (Methodologies for sampling of consignments).	*Category : SUBSTANTIVE* **(89) Australia (20 Sep 2016 9:54 AM)** Not necessarily respectively as can be preclearance.

196	~~As~~ Because many pests associated with wood are specific to particular tree species or genera, phytosanitary import requirements for wood are often ~~accordingly~~ species or genus specific. Therefore, the NPPO of the exporting country should verify that the species or genus of wood in the consignment complies with phytosanitary import requirements ~~related to species or genus~~where such genus/species requirements exist.	*Category : TECHNICAL* **(150) United States of America (21 Sep 2016 5:14 PM)** For clarity and verify that countries have specific import requirements
199	~~Some quarantine pests are commonly found in or just beneath the bark. To reduce the pest risk, the NPPO of the importing country may require the removal of bark (to produce bark-free or debarked wood) as a phytosanitary import requirement and, in the case of debarked wood, the NPPO may set tolerance levels for remaining bark. Where bark remains with wood, treatments may be used to reduce the pest risk associated with bark.~~	*Category : EDITORIAL* **(151) United States of America (21 Sep 2016 5:15 PM)** Not necessary. Much of this is repeated information
201	The complete removal of bark from round wood and other wood commodities ~~(i.e. to produce bark-free wood)~~ physically removes a layer of material in which a large number of pests may develop, as well as eliminates large areas of uneven surface that provide concealment for other pests.	*Category : EDITORIAL* **(152) United States of America (21 Sep 2016 5:15 PM)** Unnecessary details for an ISPM
201	The complete removal of bark from round wood and other wood commodities (i.e. to produce bark-free wood) physically removes a layer of material in which a large number of pests may develop, as well as eliminates large areas of uneven surface that provide concealment for other pests.	*Category : SUBSTANTIVE* **(76) South Africa (16 Sep 2016 11:22 AM)** • Addition of the word "mites". Reason being that mites can be transported on wood products and on insects infesting wood. It is not so much that the mites are pests of wood but that alien invasive mites could be introduced via wood products and for consistency with addition on the first column of table 1.
202	Bark removal eliminates pests found mostly on the surface of bark such as aphids, adelgids, scale insects, and non-wood-boring moths in some life stages. Moreover, bark removal eliminates most bark beetles and also prevents post-harvest infestation by other wood pests such as wood wasps and large wood borers (e.g. ~~Monochamus~~ *Monochamus* spp.).	*Category : EDITORIAL* **(234) Philippines (28 Sep 2016 5:37 AM)** Monochamus should be italized
202	~~Bark removal eliminates pests found mostly on the surface of bark such as aphids, adelgids, scale insects, and non-wood-boring moths in some life stages. Moreover, bark removal eliminates most bark beetles and also prevents post-harvest infestation by other wood pests such as wood wasps and large wood borers (e.g. Monochamus spp.).~~	*Category : EDITORIAL* **(153) United States of America (21 Sep 2016 5:16 PM)** Unnecessary details for an ISPM
202	Bark removal eliminates pests found mostly on the surface of bark such as aphids, adelgids, scale insects, and non-wood-boring moths in some life stages. Moreover, bark removal eliminates most bark beetles and also prevents post-harvest infestation by other wood pests such as wood wasps and large wood borers (e.g. ~~Monochamus~~ *Monochamus* spp.).	*Category : EDITORIAL* **(32) Thailand (30 Aug 2016 12:18 PM)** The scientific name should be italicized.
203	Where the NPPO of the importing country requires that wood be bark-free, the commodity should meet the definition of bark-free wood stated in ISPM 5 (see Appendix 1 for illustration of ingrown bark and bark pocket). Bark completely	*Category : TECHNICAL* **(311) Canada (30 Sep 2016 8:13 PM)** Clarifying that bark surrounded by cambium is low risk.

	surrounded by cambium presents much lower pest risk as compared to that of surface bark. In many cases, ~~this~~ the wood may have evidence of cambium, which may appear as a brown discoloured tissue on the surface of the wood, but this should not be considered as the presence of bark and does not pose a risk for pests associated with bark. In general, verification of bark-free wood should simply confirm that there is no evidence of the layer of tissue above the cambium.	
203	Where the NPPO of the importing country requires that wood be bark-free, the commodity should meet the definition of bark-free wood stated in ISPM 5 (see Appendix 1 for illustration of ingrown bark and bark ~~pocket)~~pockets). In many cases, this wood may have evidence of cambium, which may appear as a brown discoloured tissue on the surface of the wood, but this should not be considered as the presence of bark and does not pose a risk for pests associated with bark. In general, verification of bark-free wood should simply confirm that there is no evidence of the layer of tissue above the cambium.	*Category : EDITORIAL* **(276) EPPO (29 Sep 2016 5:51 PM)** Better English
203	Where the NPPO of the importing country requires that wood be bark-free, the commodity should meet the definition of bark-free wood stated in ISPM 5 (see Appendix 1 for illustration of ingrown bark and bark ~~pocket)~~pockets). In many cases, this wood may have evidence of cambium, which may appear as a brown discoloured tissue on the surface of the wood, but this should not be considered as the presence of bark and does not pose a risk for pests associated with bark. In general, verification of bark-free wood should simply confirm that there is no evidence of the layer of tissue above the cambium.	*Category : EDITORIAL* **(211) European Union (27 Sep 2016 6:42 PM)** Better English
203	Where the NPPO of the importing country requires that wood be bark-free, the commodity should meet the definition of bark-free wood stated in ISPM 5 (see Appendix 1 for illustration of ingrown bark and bark pocket). In many cases, this wood may have evidence of cambium, which may appear as a brown discoloured tissue on the surface of the wood, but this should not be considered as the presence of bark and does not pose a risk for pests associated with bark. ~~In general, verification~~ Verification of bark-free wood should simply confirm that there is no evidence of the layer of tissue above the cambium.	*Category : EDITORIAL* **(154) United States of America (21 Sep 2016 5:21 PM)** To clarify
205	The mechanical process used in the commercial removal of bark from wood does not ~~usually result in~~ completely remove all bark and some pieces (of bark) may remain. Number and size of remaining pieces could determine if the ~~wood becoming bark-free~~pests associated with the bark are completely or partly removed.	*Category : EDITORIAL* **(156) United States of America (21 Sep 2016 5:27 PM)** Suggest combining paragraphs 205 and 206. To clarify. Specific examples should not be included in the standard.
205	The mechanical process used in the commercial removal of bark from wood does not usually result in the wood becoming bark-free.	*Category : SUBSTANTIVE* **(77) South Africa (16 Sep 2016 11:23 AM)** • Addition of the word “mites”. Reason being that mites can be transported on wood

		products and on insects infesting wood. It is not so much that the mites are pests of wood but that alien invasive mites could be introduced via wood products and for consistency with addition on the first column of table 1.
206	~~When wood is debarked, pieces of bark may remain. Depending on the number and size of pieces remaining, pests associated with the bark (e.g. bark beetles, aphids, adelgids, scales) may be completely or partly removed.~~	*Category : EDITORIAL* **(157) United States of America (21 Sep 2016 5:27 PM)** See US comment in paragraph 205
207	~~Debarking to~~ Some countries specify the ~~tolerances prescribed below reduces the risk of~~ tolerance levels for bark ~~beetles completing their life cycles~~ in ~~untreated wood.~~ imported wood in their regulations.	*Category : EDITORIAL* **(158) United States of America (21 Sep 2016 5:29 PM)** To provide necessary guidance. The rest of the information is not necessary.
208	~~Any number of visually separate and clearly distinct small pieces of bark may remain, if they are:~~	*Category : EDITORIAL* **(159) United States of America (21 Sep 2016 5:29 PM)** Not necessary
209	~~- less than 3 cm in width (regardless of the length) or~~	*Category : EDITORIAL* **(160) United States of America (21 Sep 2016 5:29 PM)** Not necessary for a standard
209	~~-~~ less than 3 cm in width (regardless of the length) or	*Category : EDITORIAL* **(33) Thailand (30 Aug 2016 12:19 PM)**
210	- greater than 3 cm in width, with the total surface area of an individual piece of bark less than 50 ~~cm2~~cm^2.	*Category : EDITORIAL* **(235) Philippines (28 Sep 2016 5:38 AM)** square centimeter should be superscript
210	~~- greater than 3 cm in width, with the total surface area of an individual piece of bark less than 50 cm2.~~	*Category : EDITORIAL* **(161) United States of America (21 Sep 2016 5:30 PM)** Not necessary for a standard
210	~~-~~ greater than 3 cm in width, with the total surface area of an individual piece of bark less than 50 ~~cm2~~cm^2.	*Category : EDITORIAL* **(34) Thailand (30 Aug 2016 12:19 PM)**
211	When prescribed as a phytosanitary import requirement by the NPPO of the importing country, the NPPO of the exporting country should ensure that these requirements for debarked wood have been ~~met~~met if technically justified.	*Category : SUBSTANTIVE* **(293) United States of America (29 Sep 2016 7:40 PM)** Debarking is a part of the requirements, and all requirements should technically justified based on PRA
212	**2.2 Treatments**	*Category : SUBSTANTIVE* **(14) China (23 Jul 2016 6:34 AM)** The 2.2 Treatments require details. According to different types of log, different treatment methods were adopted to carry out the classification management.
213	~~Some treatment types may not be effective against all pests. Further guidance on treatments which may be used to address the pest risks of wood is provided in Appendix 2.~~	*Category : EDITORIAL* **(164) United States of America (21 Sep 2016 5:32 PM)** Suggest moving to after paragraph 217.
214	For all chemical treatments, the penetration depth ~~and thus the~~ and efficacy varies with the application process (dosage, temperature, etc.), ~~the~~ presence or absence of bark on the wood~~, and the~~ , wood species and moisture content. The removal of bark often improves chemical treatment penetration and may reduce the incidence of infestation of treated wood.	*Category : EDITORIAL* **(236) Philippines (28 Sep 2016 5:39 AM)** grammar

214	~~For all chemical treatments, the penetration depth and thus the efficacy varies with the application process (dosage, temperature, etc.), the presence or absence of bark on the wood, and the wood species and moisture content. The removal of bark often improves chemical treatment penetration and may reduce the incidence of infestation of treated wood.~~	*Category : EDITORIAL* **(165) United States of America (21 Sep 2016 5:33 PM)** Edited and moved after paragraph 215
215	Treatments accepted internationally, as found as annexes to ISPM 28 (Phytosanitary treatments for regulated pests) may be developed and prescribed as phytosanitary import requirements for the import of some wood commodities.	*Category : TECHNICAL* **(312) Canada (30 Sep 2016 8:17 PM)** To identify that treatment for wood have not been included under ISPM 28. However, they could be developed and added to ISPM 28.
215	~~Treatments accepted internationally, as found as annexes to ISPM 28 (Phytosanitary treatments for regulated pests) may be prescribed as phytosanitary import requirements for the import of some wood commodities.~~	*Category : TECHNICAL* **(277) EPPO (29 Sep 2016 5:51 PM)** Pragraph deleted as is does not add any new information, and the the wording used ('accepted' and 'as found as') is imprecise and confusing.
215	~~Treatments accepted internationally, as found as annexes to ISPM 28 (Phytosanitary treatments for regulated pests) may be prescribed as phytosanitary import requirements for the import of some wood commodities.~~	*Category : TECHNICAL* **(212) European Union (27 Sep 2016 6:42 PM)** Paragraph deleted as it does not add any new information, and the wording used ('accepted' and 'as found as' is imprecise and confusing.
215	Treatments accepted internationally, ~~as~~ found as annexes to ISPM 28 (Phytosanitary treatments for regulated ~~pests)~~ pests), may be prescribed as phytosanitary import requirements for the import of some wood commodities. The efficacy of all chemical treatments is affected by the penetration depth, which varies by treatment schedules, the wood species, and moisture content or presence of bark.	*Category : EDITORIAL* **(166) United States of America (21 Sep 2016 5:33 PM)** See US comment on paragraph 214 Grammar fix
215	Treatments accepted internationally, as found as annexes to ISPM 15 (*Regulation of wood packaging material in international trade*) and ISPM 28 ~~(Phytosanitary treatments for regulated pests)~~ (*Phytosanitary treatments for regulated pests*) may be prescribed as phytosanitary import requirements for the import of some wood commodities.	*Category : SUBSTANTIVE* **(35) Thailand (30 Aug 2016 12:25 PM)** The annex I of ISPM 15 should be used as treatment reference for wood commodities.
216	Treatments should be applied under the supervision or authority of the NPPO of the exporting country to meet the phytosanitary import requirements. The NPPO of the exporting country should make arrangements to ensure that treatments are applied as prescribed and where appropriate should verify that wood is free of target pests by inspection or testing. ~~Specific tools (e.g. electronic thermometers, gas chromatographs, moisture meters connected to recording equipment) may also be used to verify treatment application. Chemical pressure impregnation and chemical diffusion may leave specific colour stains on the surface of the wood.~~	*Category : EDITORIAL* **(294) United States of America (29 Sep 2016 7:42 PM)** Too specific for an ISPM
216	Treatments should be applied under the supervision or authority of the NPPO of the exporting country to meet the phytosanitary import requirements. The NPPO of the exporting country should make arrangements to ensure that treatments are	*Category : SUBSTANTIVE* **(278) EPPO (29 Sep 2016 5:51 PM)** There is only an obligation of the exporting NPPO to 'ensure' anything in the case of

	applied as prescribed and where appropriate should verify that wood is free of target pests by inspection or testing, peior to phytosanitary certification. Specific tools (e.g. electronic thermometers, gas chromatographs, moisture meters connected to recording equipment) may also be used to verify treatment application. Chemical pressure impregnation and chemical diffusion may leave specific colour stains on the surface of the wood.	the NPPO providing a phytosanitary certificate, i.e. if the NPPO has been so requested.
216	Treatments should be applied under the supervision or authority of the NPPO of the exporting country to meet the phytosanitary import requirements. The NPPO of the exporting country should make arrangements to ensure that treatments are applied as prescribed and where appropriate should verify that wood is free of target pests by inspection or testing, prior to phytosanitary certification. Specific tools (e.g. electronic thermometers, gas chromatographs, moisture meters connected to recording equipment) may also be used to verify treatment application. Chemical pressure impregnation and chemical diffusion may leave specific colour stains on the surface of the wood.	*Category : SUBSTANTIVE* **(213) European Union (27 Sep 2016 6:42 PM)** These are only obligations for the NPPO of the exporting country in cases where the NPPO has been requested to issue a phytosanitary certificate.
217	Regardless of the treatment applied, the presence of live quarantine pests should be considered as non-compliance of the consignment, with the exception of irradiation, which may result in ~~an inactivated but~~ a live sterile pest. In addition, the finding of suitable indicator organisms or fresh frass, indicating treatment failure, may also be deemed non-compliance.	*Category : TECHNICAL* **(313) Canada (30 Sep 2016 8:21 PM)** Change proposed to be more consistent with ISPM 5 definition of a sterile insect.
217	Regardless of the treatment applied, the presence of live quarantine pests should be considered as non-compliance of the consignment, with the exception of irradiation, which may result in ~~an~~ sterile or inactivated but live pest. In addition, the finding of suitable indicator organisms or fresh frass, indicating treatment failure, may also be deemed ~~non-compliance~~non-compliance depending on the treatment type.	*Category : TECHNICAL* **(295) United States of America (29 Sep 2016 7:44 PM)** Last sentence - "in addition, the finding...": Not appropriate for this to follow the point on irradiation because it is not true for irradiation.
217	Regardless of the treatment applied, the presence of live quarantine pests should be considered as non-compliance of the consignment, with the exception of irradiation, which may result in ~~an~~ inactivated but live ~~pest~~pests. In addition, the finding of suitable indicator organisms or fresh frass, indicating treatment failure, may also be deemed non-compliance.	*Category : EDITORIAL* **(279) EPPO (29 Sep 2016 5:51 PM)** Plural for consistency with "quarantine pests" in the first line.
217	Regardless of the treatment applied, the presence of live quarantine pests should be considered as non-compliance of the consignment, with the exception of irradiation, which may result ~~in an~~ in inactivated but live ~~pest~~pests. In addition, the finding of suitable indicator organisms or fresh frass, indicating treatment failure, may also be deemed non-compliance.	*Category : EDITORIAL* **(214) European Union (27 Sep 2016 6:42 PM)** Plural for consistency with QPs in first line
217	~~Regardless~~ Presence of ~~the treatment applied, the presence of~~ live quarantine pests should be considered as non-compliance of the consignment, with the exception of	*Category : EDITORIAL* **(163) United States of America (21 Sep 2016 5:31 PM)**

	irradiation, which may result in an inactivated but live pest. In addition, ~~the finding~~ findings of suitable indicator organisms ~~or~~ (or fresh ~~frass, indicating~~ frass) imply treatment ~~failure,~~ failure and may also be deemed ~~non-compliance~~non-compliant. Some treatment types may not be effective against all pests. Further guidance on treatments which may be used to address the pest risks of wood is provided in Appendix 2.	Originally paragraph 213. Would make an appropriate closing paragraph for this section.
218	~~**2.3 Chipping**~~	*Category : EDITORIAL* **(168) United States of America (21 Sep 2016 5:58 PM)** Incorporated within another section below.
219	~~The mechanical action of chipping or grinding wood can be effective in destroying most wood-dwelling pests. Reducing the chip size to a maximum of 3 cm in at least two dimensions may be used to address most insect pest risks. However, fungi, nematodes and small insects such as some Scolytinae or small Buprestidae, Bostrichidae or Anobiidae may continue to present a pest risk.~~	*Category : EDITORIAL* **(169) United States of America (21 Sep 2016 6:02 PM)** See US comment on paragraph 218
219	The mechanical action of chipping or grinding wood can be effective in destroying most wood-dwelling pests. Reducing the chip size to a maximum of 3 cm in at least two dimensions may be used to address most insect pest risks. However, fungi, nematodes and small insects such as some Scolytinae or small Buprestidae, Bostrichidae or Anobiidae and contamination during packaging with soil, plant material, animal residues and/or seeds may continue to present a pest risk~~.~~.	*Category : TECHNICAL* **(93) Australia (20 Sep 2016 12:37 PM)** To include risk of contamination
220	**2.4 Inspection and testing**	*Category : TECHNICAL* **(170) United States of America (21 Sep 2016 6:02 PM)** The information in this section is very detailed but doesn't provide any guidance on requirements, which should be part of the standard. There are differences between countries on how inspections are conducted. This section doesn't add anything to harmonize this.
220	**2.4 Inspection and testing**	*Category : SUBSTANTIVE* **(79) South Africa (16 Sep 2016 11:25 AM)** • Replacement of the word "quarantine" with "regulated". The terminology as defined in ISPM 5 (2009). Glossary of phytosanitary terms. includes both quarantine and regulated non--quarantine pests. • Deletion of the word "sometimes" to provide clarity and simplicity to the text.
221	~~Inspection or testing may be used for the detection of specific pests associated with wood. Depending on the wood commodity, inspection may be used to identify specific signs or symptoms of pests. For example, inspection may be used to detect the presence of bark beetles, wood borers and decay fungi on round wood and sawn wood. Inspection may also be carried out at various points along the production process to determine if measures applied have been effective.~~	*Category : EDITORIAL* **(171) United States of America (21 Sep 2016 6:03 PM)** See US comment on paragraph 220
222	~~Where undertaken, inspection methods should enable the detection of any signs or symptoms of quarantine pests. The detection of certain other organisms may~~	*Category : EDITORIAL* **(172) United States of America (21 Sep 2016 6:03 PM)** See US comment on paragraph 220

	~~indicate treatment failure. Signs may include the fresh frass of insects, galleries or tunnels of wood borers, staining on the surface of the wood caused by fungi, and voids or signs of wood decay. Signs of wood decay include bleeding cankers, long discontinuous brown streaks on outer sapwood and outer sapwood discoloration, soft areas in the wood, unexplained swelling, resin flow on logs, and cracks, girdling and wounds in sawn wood. Where bark is present it may be peeled back to look for signs of insect feeding and galleries, and for staining or streaking of the wood underneath, which may indicate the presence of pests. Acoustic, sensory and other methods may also be used for detection. Further examination should be made to verify whether live quarantine pests or indicator organisms are present; for example, examination for living life stages of insects such as egg masses and pupae.~~	
223	Testing may be used to verify ~~the application or effect of other phytosanitary measures such as the application of treatments. Testing is generally limited to the detection of fungi and nematodes. For example determination of the presence of nematodes that are quarantine pests may be made using a combination of microscopy and molecular techniques on samples of wood taken from consignments.~~ the effect of other phytosanitary measures such as the application of treatments. Testing is generally limited to the detection of fungi and nematodes. For example determination of the presence of nematodes that are quarantine pests may be made using a combination of microscopy and molecular techniques on samples of wood taken from consignments.	*Category : SUBSTANTIVE* **(186) Myanmar (25 Sep 2016 11:35 AM)** Myanmar propose to delete application or before or effect of other phytosanitary measures because the application of treatment also mention in the same sentence.
223	~~Testing may be used to verify the application or effect of other phytosanitary measures such as the application of treatments. Testing is generally limited to the detection of fungi and nematodes. For example determination of the presence of nematodes that are quarantine pests may be made using a combination of microscopy and molecular techniques on samples of wood taken from consignments.~~	*Category : EDITORIAL* **(173) United States of America (21 Sep 2016 6:03 PM)** See US comment on paragraph 220
225	**2.5 Pest free ~~areas and~~ areas, pest free places of ~~production~~production and areas of low pest prevalence**	*Category : TECHNICAL* **(174) United States of America (21 Sep 2016 6:04 PM)** Suggest including
226	Pest free areas (ISPM 4 (Requirements for the establishment of pest free areas); ISPM 8 (Determination of pest status in an area); ISPM 29 (Recognition of pest free areas and areas of low pest prevalence)) and pest free places of production (ISPM 10 (Requirements for the establishment of pest free places of production and pest free production sites)) may be established to manage the pest risk associated with wood. However, the use of pest free places of production or pest free production sites may be limited to specific situations such as forest plantations located within agricultural or suburban areas.	*Category : TECHNICAL* **(314) Canada (30 Sep 2016 8:22 PM)** Use of pest free production sites highlighted

226	Pest free areas ~~(ISPM 4 (Requirements for the establishment of~~ (PFAs), pest free ~~areas); ISPM 8 (Determination~~ places of ~~pest status in an area); ISPM 29 (Recognition of pest free areas~~ production and areas of low pest ~~prevalence)) and pest free places of production (ISPM 10 (Requirements for the establishment of pest free places of production and pest free production sites))~~ prevalence (ALPP) may be established to manage the pest risk associated with wood, where feasible. ~~However~~Relevant guidance is presented in ISPMs 4, ~~the use of pest free places of production may be limited to specific situations such as forest plantations located within agricultural or suburban areas~~8, 10, 22 and 29.	*Category : EDITORIAL* **(175) United States of America (21 Sep 2016 6:06 PM)** To simplify the text
226	Pest free areas (ISPM 4 ~~(Requirements for the establishment of pest free areas)~~(*Requirements for the establishment of pest free areas*); ISPM 8 ~~(Determination of pest status in an area)~~(*Determination of pest status in an area*); ISPM 29 ~~(Recognition of pest free areas~~ (*Recognition of pest free areas and areas of low pest prevalence*)) and ~~areas of low~~ pest ~~prevalence)) and pest~~ free places of production (ISPM 10 ~~(Requirements for the establishment of pest free places of production and pest free production sites))~~ (*Requirements for the establishment of pest free places of production and pest free production sites*)) may be established to manage the pest risk associated with wood. However, the use of pest free places of production may be limited to specific situations such as forest plantations located within agricultural or suburban areas.	*Category : EDITORIAL* **(36) Thailand (30 Aug 2016 12:29 PM)** The title of ISPM that are referred in this standard should be italicized.
227	~~**2.6 Areas of low pest prevalence**~~	*Category : EDITORIAL* **(176) United States of America (21 Sep 2016 6:07 PM)** To simplify the text. See US comments in paragraphs 225 and 226
228	~~Areas of low pest prevalence (ISPM 8; ISPM 22 (*Requirements for the establishment of areas of low pest prevalence*); ISPM 29) may be established to reduce the pest risk associated with the movement of wood. Biological control may be used as an option in achieving the requirements for an area of low pest prevalence.~~	*Category : EDITORIAL* **(177) United States of America (21 Sep 2016 6:07 PM)** To simplify the text. See US comments in paragraphs 225 and 226
229	**2.~~7~~6 Systems approaches**	*Category : EDITORIAL* **(178) United States of America (21 Sep 2016 6:08 PM)** Renumbering due to US proposal to delete subsection 2.6 Areas of low pest prevalence (see US comment on paragraph 227)
230	The pest risk of the international movement of wood may be managed effectively by developing systems approaches that integrate measures for pest risk management in a defined manner (ISPM 14 (The use of integrated measures in a systems approach for pest risk management)). Existing forest management systems, both pre- and post-harvest, including processing, storage and transportation may include activities such as site selection from pest free areas, inspection to ensure the wood is pest free, ~~treatments~~ treatments, physical barriers	*Category : TECHNICAL* **(315) Canada (30 Sep 2016 8:24 PM)** Storage and transport measures highlighted.

	(e.g. wrapping wood), and other measures which when integrated in a systems approach are effective in pest risk management.	
230	The pest risk of the international movement of wood may be managed effectively by developing systems approaches that integrate measures for pest risk ~~management~~ management as described in ~~a defined manner (ISPM 14~~ ISPM 14. (The use of integrated measures in a systems approach for pest risk management)). Existing forest management ~~systems, both pre- and post-harvest, including processing, storage and transportation~~ systems may include ~~activities such as site selection from pest free areas, inspection to ensure the wood is pest free, treatments~~ pre- and ~~other measures~~ post-harvest practices which ~~when~~ can be integrated with other measures in a systems approach ~~are~~ for effective ~~in~~ pest risk management.	*Category : EDITORIAL* **(179) United States of America (21 Sep 2016 6:10 PM)** For clarity and simplification of the text
230	The pest risk of the international movement of wood may be managed effectively by developing systems approaches that integrate measures for pest risk management in a defined manner (ISPM 14 ~~(The use of integrated measures in a systems approach for pest risk management))~~(*The use of integrated measures in a systems approach for pest risk management*)). Existing forest management systems, both pre- and post-harvest, including processing, storage and transportation may include activities such as site selection from pest free areas, inspection to ensure the wood is pest free, treatments and other measures which when integrated in a systems approach are effective in pest risk management.	*Category : EDITORIAL* **(37) Thailand (30 Aug 2016 12:30 PM)** The title of ISPM that are referred in this standard should be italicized.
231	~~Some of the pest risk associated with round wood (in particular that of deep wood borers and certain nematodes) is difficult to manage through the application of a single phytosanitary measure. In these situations, a combination of phytosanitary measures in a systems approach may be applied.~~	*Category : EDITORIAL* **(180) United States of America (21 Sep 2016 6:10 PM)** Unnecessary for an ISPM
232	In accordance with ISPM 14, the NPPO of the importing country may ~~agree with the NPPO of the exporting country to~~ implement additional measures within its territory for transporting, storing or processing wood after import. For example, round wood with bark that may harbour bark beetles that are quarantine pests may be permitted to enter the importing country only during a period when the bark beetles are not active. ~~Processing~~ In this case, processing in the importing country to remove the pest risk ~~would~~ may be required to occur before individuals develop to the active stage. Requirements that the wood be debarked and the bark or wood residue be used as a biofuel or otherwise destroyed before the active period of the beetles commences ~~could~~ may be used to sufficiently prevent the risk of introduction and spread of the bark beetles that are quarantine pests.	*Category : SUBSTANTIVE* **(280) EPPO (29 Sep 2016 5:51 PM)** Introduction of a logical link. "May" (twice) is more appropriate wording for a standard There is no obligation (neither in IPPC nor in ISPM 14), and it would not make any sense to require, that an importing NPPO need to have the agreement of an exporting NPPO in order to take post-import measures.
232	In accordance with ISPM 14, the NPPO of the importing country may agree with the NPPO of the exporting country to implement additional measures within its territory for transporting, storing or processing wood after import. For example, round wood with bark that may harbour bark beetles that are quarantine pests may	*Category : SUBSTANTIVE* **(237) Philippines (28 Sep 2016 5:45 AM)** for clarity

	be permitted to enter the importing country only during a period when the bark beetles are not active. Processing in the importing country to remove the pest risk would be required to occur before ~~individuals~~ beetle develop to the active stage. Requirements that the wood be debarked and the bark or wood residue be used as a biofuel or otherwise destroyed before the active period of the beetles commences could be used to sufficiently prevent the risk of introduction and spread of the bark beetles that are quarantine pests.	
232	In accordance with ISPM 14, the NPPO of the importing country may ~~agree with the NPPO of the exporting country to~~ implement additional measures within its territory for transporting, storing or processing wood after import. For example, round wood with bark that may harbour bark beetles that are quarantine pests may be permitted to enter the importing country only during a period when the bark beetles are not active. ~~Processing~~ In this case, processing in the importing country to remove the pest ~~risk would~~ risk may be required to occur before individuals develop to the active stage. Requirements that the wood be debarked and the bark or wood residue be used as a biofuel or otherwise destroyed before the active period of the beetles ~~commences could~~ commences may be used to sufficiently prevent the risk of introduction and spread of the bark beetles that are quarantine pests.	*Category : SUBSTANTIVE* **(215) European Union (27 Sep 2016 6:42 PM)** There is no obligation (neither in IPPC nor ISPM 14) that an importing country need to have the agreement of an exporting country in order to take post-import measures, - and it would make no sense to globally require such agreement through this standard. Technical: 'may' (twice) is the correct verb to express the level of obligation.
232	~~In accordance with ISPM 14, the NPPO of the importing country may agree with the NPPO of the exporting country to implement additional measures within its territory for transporting, storing or processing wood after import. For example, round wood with bark that may harbour bark beetles that are quarantine pests may be permitted to enter the importing country only during a period when the bark beetles are not active. Processing in the importing country to remove the pest risk would be required to occur before individuals develop to the active stage. Requirements that the wood be debarked and the bark or wood residue be used as a biofuel or otherwise destroyed before the active period of the beetles commences could be used to sufficiently prevent the risk of introduction and spread of the bark beetles that are quarantine pests.~~	*Category : EDITORIAL* **(181) United States of America (21 Sep 2016 6:10 PM)** Unnecessary for an ISPM
233	~~The pest risk associated with fungi may be managed effectively through the application of appropriate harvesting measures (e.g. visual selection of wood free from decay) and the application of a surface fungicide.~~	*Category : EDITORIAL* **(182) United States of America (21 Sep 2016 6:11 PM)** Unnecessary for an ISPM
233	~~The pest risk associated with fungi may be managed effectively through the application of appropriate harvesting measures (e.g. visual selection of wood free from decay) and the application of a surface fungicide.~~The pest risk associated with fungi may be managed effectively through selection from pest free areas or pest free places of production, application of appropriate harvesting and processing measures (e.g.	*Category : SUBSTANTIVE* **(94) Australia (20 Sep 2016 12:44 PM)** To include option for sourcing from pest free areas or pest free places of production

	visual selection of wood free from signs of infestation) and treatment (e.g. surface fungicide).	
235	The intended use of wood may affect its pest risk, because some intended uses (e.g. round wood as firewood, wood chips as biofuel or for ~~horticulture)~~ horticultural purposes) may increase the probability of introduction and spread of quarantine pests (ISPM 32 (Categorization of commodities according to their pest risk)). Therefore, intended use should be taken into account when assessing or managing pest risk associated with the international movement of wood.	*Category : EDITORIAL* **(316) Canada (30 Sep 2016 8:25 PM)** Editorial
235	The intended use of wood may affect its pest risk, because some intended uses (e.g. round wood as firewood, wood chips as biofuel or for horticulture) may ~~increase~~ affect the probability of introduction and spread of quarantine pests (ISPM 32 (Categorization of commodities according to their pest risk)). Therefore, intended use should be taken into account when assessing or managing pest risk associated with the international movement of wood.	*Category : TECHNICAL* **(281) EPPO (29 Sep 2016 5:51 PM)** More inclusive and technically correct. Wording. E.g.,wood chips for biofuel present a lower risk than wood chips for horticulture
235	The intended use of wood may affect its pest risk, because some intended uses (e.g. round wood as firewood, wood chips as biofuel or for horticulture) may ~~increase~~ affect the probability of introduction and spread of quarantine pests (ISPM 32 (Categorization of commodities according to their pest risk)). Therefore, intended use should be taken into account when assessing or managing pest risk associated with the international movement of wood.	*Category : TECHNICAL* **(216) European Union (27 Sep 2016 6:42 PM)** More inclusive and technically correct wording. E.g., wood chips for biofuel present a lower risk than wood chips for horticultural uses.
235	The intended use of wood may affect its pest risk, because some intended uses (e.g. round wood as firewood, wood chips as biofuel or for horticulture) may increase the probability of introduction and spread of quarantine pests (ISPM 32 ~~(Categorization of commodities according to their pest risk))~~(*Categorization of commodities according to their pest risk*)). Therefore, intended use should be taken into account when assessing or managing pest risk associated with the international movement of wood.	*Category : EDITORIAL* **(38) Thailand (30 Aug 2016 12:30 PM)** The title of ISPM that are referred in this standard should be italicized.
237	Relevant information on non-compliance notification and emergency action is provided in ISPM ~~20 and ISPM~~ 13 (Guidelines for the notification of non-compliance and emergency ~~action)~~action) and 20. ~~The NPPO of the importing country should notify the NPPO of the exporting country in cases where live quarantine pests are found. NPPOs are also encouraged to notify other relevant cases of non-compliance as specified in ISPM 13.~~	*Category : EDITORIAL* **(183) United States of America (21 Sep 2016 6:12 PM)** Deleted unnecessary information
237	Relevant information on non-compliance and emergency action is provided in ISPM 20 and ISPM 13 (Guidelines for the notification of non-compliance and emergency action). The NPPO of the importing country should notify the NPPO of the exporting country in cases where live quarantine pests are found, excluding the result of irradiation as described in section 2.2. NPPOs are also encouraged to notify other relevant cases of non-compliance as specified in ISPM 13.	*Category : SUBSTANTIVE* **(39) Thailand (30 Aug 2016 12:36 PM)** The exemption for the result of irradiation should be added to conform with section 2.2 treatment.

242		*Category : EDITORIAL* **(17) Indonesia (25 Jul 2016 3:47 AM)** add caption "Heartwood" and "Sapwood" on Figure 1 and Figure 2
243	**Figure 1**. Drawing of a cross-section of round wood. Drawing courtesy Shane Sela, Canadian Food Inspection Agency (2016).	*Category : EDITORIAL* **(184) United States of America (21 Sep 2016 6:13 PM)** Suggest to show cambium clearly by showing wood as white and cambium as light brown, or similar distinguishing feature
244		*Category : EDITORIAL* **(18) Indonesia (25 Jul 2016 3:48 AM)** add caption "Heartwood" and "Sapwood" for Figure 1 and Figure 2
251	Despite the proven effectiveness of some fumigants against certain pests, there are limitations to their use to reduce pest risk. Fumigants vary in their ability to penetrate the wood and some are therefore effective only against pests in, on or just beneath the bark. The penetration depth for some fumigants may be limited to about 10 cm from the wood surface. Penetration is greater in dry than in fresh-cut wood.	*Category : SUBSTANTIVE* **(238) Philippines (28 Sep 2016 5:47 AM)** specify fumigants that can be use, including dosage and exposure time. preferably in table format
256	In the process of spraying or dipping, liquid or dissolved chemicals are applied to wood at ambient pressure. This treatment results in limited penetration into the sapwood. Penetration depends on the species of the wood, the kind of wood (sapwood or heartwood), and the properties of the chemical product. Both removal of bark and application of heat increase the depth of penetration into the sapwood. The active ingredient of the chemical product may not prevent the emergence of pests already infesting the wood. Protection of the treated wood from subsequent pest infestation depends on the protective layer of chemical product remaining intact. Post-treatment infestation by some pests (e.g. dry wood borers) may take place if the wood is further sawn after treatment and a portion of the cross-section has not been penetrated by the chemical product.	*Category : SUBSTANTIVE* **(239) Philippines (28 Sep 2016 5:49 AM)** specify chemicals to be use, including dosage and application time
260	Chemical pressure impregnation is commonly used to protect wood from infestation by pests after other treatments. It may also have some effect in preventing the emergence to the wood surface of pests that have survived treatment. The penetration of the chemical product into the wood is much greater than with spraying or dipping, but depends on the wood species and the properties of the chemical product. Penetration is generally throughout the sapwood and through a limited portion of the heartwood. Debarking or mechanical perforation of the wood may improve penetration of the chemical product. Penetration also depends on the moisture content of the wood~~. Drying~~ , so drying wood before chemical pressure impregnation may ~~also~~ improve penetration. Chemical pressure impregnation is effective against some wood-boring insects. In some impregnation processes, the chemical is applied at a temperature sufficiently high to be equivalent to a heat treatment. The protection of the treated wood from subsequent infestation depends on the protective layer of the chemical product remaining intact. Post-treatment infestation by some pests (e.g. dry wood borers) may take	*Category : EDITORIAL* **(282) EPPO (29 Sep 2016 5:51 PM)** Introduction of a logical link.

	place if the wood is sawn after treatment and a portion of the cross-section has not been penetrated by the chemical product.	
260	Chemical pressure impregnation is commonly used to protect wood from infestation by pests after other treatments. It may also have some effect in preventing the emergence to the wood surface of pests that have survived treatment. The penetration of the chemical product into the wood is much greater than with spraying or dipping, but depends on the wood species and the properties of the chemical product. Penetration is generally throughout the sapwood and through a limited portion of the heartwood. Debarking or mechanical perforation of the wood may improve penetration of the chemical product. Penetration also depends on the moisture content of the wood, so. ~~Drying~~ drying wood before chemical pressure impregnation may ~~also~~ improve penetration. Chemical pressure impregnation is effective against some wood-boring insects. In some impregnation processes, the chemical is applied at a temperature sufficiently high to be equivalent to a heat treatment. The protection of the treated wood from subsequent infestation depends on the protective layer of the chemical product remaining intact. Post-treatment infestation by some pests (e.g. dry wood borers) may take place if the wood is sawn after treatment and a portion of the cross-section has not been penetrated by the chemical product.	*Category : EDITORIAL* **(217) European Union (27 Sep 2016 6:42 PM)** introducing the logical link
262	Heat treatment may be used in controlling pests associated with all wood commodities. The presence or absence of bark has no effect on the efficacy of heat treatment but should be taken into account if a heat treatment schedule specifies the maximum dimensions of the wood being treated.	*Category : SUBSTANTIVE* **(240) Philippines (28 Sep 2016 5:52 AM)** specify recommended temperature and duration. similar to ispm 15
263	The process of heat treatment involves heating wood to a temperature for a period of time (with or without moisture ~~reduction)~~ control) that is specific to the target pest. The minimum treatment time in the heat chamber necessary to reach the required temperature throughout the profile of the wood depends on the wood's dimensions, species, density and moisture content as well as on the capacity of the chamber and other factors. The heat may be produced in a conventional heat treatment chamber or by dielectric, solar or other means of heating.	*Category : TECHNICAL* **(283) EPPO (29 Sep 2016 5:51 PM)** Less restrictive: both moisture reduction or increase could be relevant
263	The process of heat treatment involves heating wood to a temperature for a period of time (with or without moisture ~~reduction)~~ control) that is specific to the target pest. The minimum treatment time in the heat chamber necessary to reach the required temperature throughout the profile of the wood depends on the wood's dimensions, species, density and moisture content as well as on the capacity of the chamber and other factors. The heat may be produced in a conventional heat treatment chamber or by dielectric, solar or other means of heating.	*Category : TECHNICAL* **(218) European Union (27 Sep 2016 6:42 PM)** Less restrictive: also increase may be relevant

264	The temperature required to kill pests associated with wood varies because heat tolerance varies across species. Heat-treated wood may still be susceptible to ~~common~~ Saprophytic moulds, particularly if moisture content remains high; however, mould should not be considered a phytosanitary concern.	*Category : TECHNICAL* **(185) United States of America (21 Sep 2016 6:24 PM)** More technically accurate
265	~~**Kiln-drying**~~	*Category : SUBSTANTIVE* **(241) Philippines (28 Sep 2016 5:53 AM)** proposed to be deleted on ispm 5
267	Kiln-drying is ~~a~~ an industrial process in which the moisture content in wood is reduced, by the application of heat, to achieve the prescribed moisture content for the intended use of the wood. Kiln-drying may be considered a heat treatment if carried out at sufficient temperatures and for sufficient durations. If lethal temperatures are not achieved throughout the relevant wood layers, kiln-drying on its own should not be considered a phytosanitary ~~treatment~~measure.	*Category : TECHNICAL* **(284) EPPO (29 Sep 2016 5:51 PM)** Phytosanitary treatment is not defined in ISPM 5 and consistency with last sentence of paragraph 270. Cf. draft amendments to ISPM 5
267	Kiln-drying is ~~a~~ an industrial process in which the moisture content in wood is reduced, by the application of heat, to achieve the prescribed moisture content for the intended use of the wood. Kiln-drying may be considered a heat treatment if carried out at sufficient temperatures and for sufficient durations. If lethal temperatures are not achieved throughout the relevant wood layers, kiln-drying on its own should not be considered a phytosanitary ~~treatment~~measure.	*Category : TECHNICAL* **(219) European Union (27 Sep 2016 6:42 PM)** Cf. current draft amendment to ISPM 5. Consistency with last sentence of para 270.
269	~~**Air-drying**~~	*Category : SUBSTANTIVE* **(242) Philippines (28 Sep 2016 5:54 AM)** air drying is not a treatment
272	**Irradiation**	*Category : SUBSTANTIVE* **(244) Philippines (28 Sep 2016 6:00 AM)** Specify levels (ratio) of oxygen and carbon dioxide per specific wood type and wood (process) material
272	**Irradiation**	*Category : SUBSTANTIVE* **(243) Philippines (28 Sep 2016 5:56 AM)** is there an approved dosage for specific commodities such as wood (process) material? if yes, we need to include them here
272	**Irradiation**	*Category : SUBSTANTIVE* **(78) South Africa (16 Sep 2016 11:24 AM)** • Addition of the wordings "However irradiation protocols should be developed for each specific pest group as indicated on table 1." to provide contextual clarification as there is no indication of irradiation dosage on specific wood pests.
273	The exposure of wood to ionizing radiation (e.g. accelerated electrons, x-rays, gamma rays) may be sufficient to kill, sterilize or inactivate pests (ISPM 18 ~~(Guidelines for the use of irradiation as a phytosanitary measure))~~(*Guidelines for the use of irradiation as a phytosanitary measure*)).	*Category : EDITORIAL* **(40) Thailand (30 Aug 2016 12:39 PM)** The title of ISPM that are referred in this standard should be italicized.
276	In such treatments, wood ~~is be~~ is exposed to modified atmospheres (e.g. low oxygen, high carbon dioxide) for extended periods of time to kill or inactivate pests. Modified atmospheres can be artificially generated in gas chambers or	*Category : EDITORIAL* **(245) Philippines (28 Sep 2016 6:00 AM)** grammar

	allowed to occur naturally, for instance during water storage or when the wood is wrapped in airtight plastic.	