ATTACHMENT 5

CONSISTENCY CORRECTIONS IN RELATION TO HARMONIZATION OF FRUIT FLY STANDARDS

(Developed by the TPFF, October 2015; approved by SC May 2016 pending CPM-13 decision on reorganization)

ANNEX 1 (Establishment of areas of low pest prevalence for fruit flies (2008)) (ex ISPM 30), including APPENDIX 1 (Typical applications of an FF-ALPP) (ex Appendix 2 of ISPM 30), and ANNEX 2 (Parameters used to estimate the level of fruit fly prevalence) (ex Annex 1 of ISPM 30) of ISPM 35 (*Systems approach for pest risk management of fruit flies (Tephritidae)*)

Existing text from ex ISPM 30 is indicated in red text except for ex ISPM 30 Annex 2 which is indicated in green text because it was merged into section 8 on corrective action plans.

New text and proposed changes to existing text are indicated in black text or in track changes mode. Some text has been highlighted to indicate a special change, as it would otherwise not be clear. The "explanation column" clarifies this.

Para. No.	Proposal for consistency change (underline = addition; strikethrough = deletion)	Explanation for change
[1]	This annex is a prescriptive part of the standard. ~~***Adoption***~~ **ANNEX 1 Establishment of areas of low pest prevalence for fruit flies**	Existing text from ex ISPM 30 is indicated in red.
[2]	~~This standard was adopted by the Third Session of the Commission on Phytosanitary Measures in April 2008.~~	Deleted as not appropriate here.
[3]	~~**INTRODUCTION**~~	Deleted as merged with ISPM 35.
[4]	~~**Scope**~~	Deleted as merged with ISPM 35.

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[5]	~~This standard provides guidelines for the establishment and maintenance of areas of low pest prevalence for fruit flies (FF-ALPPs) by a national plant protection organization (NPPO). Such areas may be utilized as official pest risk management measures alone, or as part of a systems approach, to facilitate trade of fruit fly host products, or to minimize the spread of regulated fruit flies within an area. This standard applies to fruit flies (Tephritidae) of economic importance.~~	Most of this paragraph was deleted, the rest (highlighted) integrated into the scope of ISPM 35.
[6]	~~**References** [standard text to be inserted]~~	Deleted as merged with ISPM 35.
[7]	~~**Definitions**~~	Deleted as merged with ISPM 35.
[8]	~~**Definitions of phytosanitary terms used in the present standard can be found in ISPM 5 (*Glossary of phytosanitary terms*).**~~	Deleted as merged with ISPM 35.
[9]	~~**Outline of Requirements**~~	Deleted as merged with ISPM 35
[10]	This annex provides guidance for the ~~The general requirements for~~ establishment and maintenance by an NPPO of an FF-ALPP with the aim to facilitate trade by minimizing the risk of introduction or spread of regulated fruit flies. The guidance covers:	Text integrated from [25]. Editorial corrections (abbreviations that are defined in the core standard need not be re-defined in the component documents).
[11]	• confirming the operational and economic feasibility of the FF-ALPP	
[12]	• describing the purpose of the FF-ALPP	Editorial correction.
[13]	• listing the target fruit fly species~~(s)~~ for the FF-ALPP	
[14]	• operational plans	
[15]	• determination of the FF-ALPP	
[16]	• documentation and record keeping	
[17]	• supervision activities.	
[18]	~~For the establishment of the FF-ALPP, parameters used to estimate the level of fruit fly~~	Moved to ISPM 35 [12] (with wording revised as agreed by Standards

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	~~prevalence and the efficacy of trapping devices for surveillance should be determined as stated in Annex 1. Surveillance, control measures and corrective action planning are required for both establishment and maintenance. Corrective action planning is described in Annex 2.~~	Committee in their November 2017 meeting).
[19]	~~Other specific requirements include phytosanitary procedures, as well as suspension, loss and reinstatement of the status of the FF-ALPP.~~	This was suggested to be moved to ISPM 35 [12], however the Standards Committee in their November 2017 meeting agreed to delete this sentence.
[20]	Information on the typical applications of an FF-ALPP is available in Appendix 1 of this annex.	Appendix 2 of ex ISPM 30 has been renumbered Appendix 1 of Annex 1 of ISPM 35 and reference added for clarity.
[21]	~~**BACKGROUND**~~	Deleted as merged with ISPM 35.
[22]	~~The International Plant Protection Convention (IPPC, 1997) contains provisions for areas of low pest prevalence (ALPPs), as does the World Trade Organization Agreement on the Application of Sanitary and Phytosanitary Measures (Article 6 of the WTO-SPS Agreement). ISPM 22:2005 describes different types of ALPPs and provides general guidance on the establishment of ALPPs. ALPPs may also be used as part of a systems approach (ISPM 14:2002).~~	First part deleted and two last sentences (highlighted) moved to ISPM 35.
[23]	~~Fruit flies are a very important group of pests for many countries because of their potential to cause damage to fruits and restrict national and international trade for plant products that are hosts of fruit flies.~~	Deleted as duplication of first paragraph of Background of ISPM 35.
[24]	~~The high probability of introduction of fruit flies associated with a wide range of hosts results in restrictions imposed by many importing countries and the need for phytosanitary measures to be applied in exporting countries related to movement of host material or regulated articles to ensure that the risk of introduction is appropriately mitigated.~~	Deleted as duplicated in the introductory remarks of this annex and also covered by the scope of ISPM 35.
[25]	~~This standard provides guidance for the establishment and maintenance by the NPPO of FF-ALPPs with the aim to facilitate trade by minimizing the risk of introduction or spread of regulated fruit flies.~~	Integrated into the introductory remarks of this annex ([10]).
[26]	FF-ALPPs are generally used as buffer zones for FF-PFAs, fruit fly free places of production or fruit fly free production sites (either as a permanent buffer zone or as part of an eradication process), or for export purposes, usually in conjunction with other risk	Editorial corrections.

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	mitigation measures as a component of an FF-SA (which may include all or part of an FF-ALPP that acts as a buffer zone).	
[27]	They may occur naturally (and subsequently be verified, declared and monitored or otherwise managed); they may occur as a result of pest control practices during crop production that suppress the population of fruit flies in an area to limit their impact on the crop; or they may be established as a result of control practices that reduce the number of fruit flies in the area to a specified low level.	
[28]	The decision to establish an FF-ALPP may be closely linked to market access as well as to economic and operational feasibility.	
[29]	If an FF-ALPP is established for the export of fruit fly host commodities, the parameters for the establishment and maintenance of the FF-ALPP should be determined and agreed to in conjunction with the importing country, in consideration of the guidance presented in this ~~standard~~annex and in accordance with ISPM 29 (*Recognition of pest free areas and areas of low pest prevalence*)~~:2007~~.	Editorial correction (to avoid use of "guidelines").
[30]	The requirements for the establishment of FF-ALPPs in this ~~standard~~ annex can also be applied for movement of fruit between FF-ALPPs within a country.	Editorial correction as the reference is to FF-ALPPs only.
[31]	~~The target pests for which this standard was developed include insects of the order Diptera, family Tephritidae, of the genera *Anastrepha*, *Bactrocera*, *Ceratitis*, *Dacus*, *Rhagoletis* and *Toxotrypana*.~~	Deleted as ISPM 35 has "Tephritidae" in the title hence the specification is superfluous in this annex.
[32]	~~**REQUIREMENTS**~~	
[33]	~~**1. General Requirements**~~	
[34]	The concepts and provisions of ISPM 22 apply to the establishment and maintenance of areas of low pest prevalence for a specified pest or a group of pests, including fruit flies, and therefore ISPM 22 should be referred to in conjunction with this ~~standard~~ annex.	Editorial corrections (the ISPM title was given in the core ISPM and doesn't need to be given again in component documents).
[35]	An FF-ALPP may be established in accordance with this ~~standard~~ annex under a variety of situations. Some situations may require the application of the full range of elements described in this ~~standard~~ annex, whereas others may require the application	Editorial corrections ("elements provided by this standard" reads oddly).

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	of only some of those elements.	
[36]	Phytosanitary measures and specific procedures as further described in this ~~standard~~ annex may be required for the establishment and maintenance of an FF-ALPP by the NPPO. The decision to establish an FF-ALPP may be based on all or some of the technical factors described in this ~~standard~~ annex, as appropriate. They include factors such as pest biology and control methods, which will vary according to the species of fruit fly for which the FF-ALPP is being established.	Editorial corrections (for clarity, consistency). On "official", IPPC Style Guide says: "Anything "established, authorized or performed by an NPPO" is by definition "official". Many Glossary terms are defined as "official" (e.g. area, inspection, phytosanitary action, phytosanitary measure, quarantine, surveillance, test, treatment). It is therefore recommended not to use the word "official" where it is redundant."
[37]	The establishment of an FF-ALPP should be considered against the overall operational and economic feasibility of establishing a programme to meet and maintain the low pest level and the objectives of the FF-ALPP.	Editorial correction (see explanation at [36]).
[38]	An FF-ALPP may be established to facilitate the movement of fruit fly hosts from one FF-ALPP to another area of the same fruit fly pest status in order to protect areas endangered by a regulated fruit fly pest.	Editorial correction (consistency of terminology, sense).
[39]	The essential prerequisite for the establishment of an FF-ALPP is an area that can be delimited, monitored and verified by the NPPO to be of a specified fruit fly low pest prevalence level. The area may occur naturally as a result of climatic, biological or geographical factors that reduce or limit the fruit fly population through all or part of the year, it may be in place to protect an FF-PFA or to support sustainable crop production, or it may have developed in response to suppression or eradication actions.	Editorial correction (for logical flow of information and elimination of redundancy).
[40]	An area can be defined as an FF-ALPP for one or more target fruit fly species. However, for an FF-ALPP covering multiple target fruit fly species, trapping devices and their deployment densities and locations should be specified (see Appendix 1 of ISPM 26) and low pest prevalence levels determined for each target fruit fly species.	Cross-reference added to enhance clarity. Editorial correction (need to remove comma to ensure "determined for each..." applies to "trapping devices..." too).
[41]	FF-ALPPs should include public awareness programmes of a nature outlined in ~~section 1.1 of~~ ISPM 26~~:2006~~.	
[42]	**1.~~1~~ Operational Plans**	Editorial correction.
[43]	An official operational plan is needed to specify the phytosanitary procedures required to establish and maintain an FF-ALPP.	Potentially, "official" may be deleted (see explanation at [36]).

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[44]	The operational plan should describe the main tasks to be carried out such as surveillance activities, procedures to maintain the specified level of low pest prevalence, preparation of the corrective action plan, and any others that are required to achieve the objective of the FF-ALPP.	Editorial correction.
[45]	**~~1.~~2. Determination of an FF-ALPP**	
[46]	Elements to be considered in the determination of an FF-ALPP are as follows:	
[47]	• delimitation of the area (size, detailed maps including an accurate description of the boundaries or global positioning system (GPS) coordinates for the boundaries, natural barriers, ~~points of~~ entry points, location of commercial and, as appropriate, non-commercial hosts of the target fruit fly and urban areas)	Editorial corrections. In CPM 2017/INF/11, the EU and its 28 Members States considered that the substitution of the term "entry points" by the Glossary term "points of entry" should not be made, because, according to the General recommendations on use of terms in ISPMs, "point of entry" should not be used in relation to entrance points into a pest free area (PFA) or an area of low pest prevalence (ALPP). The small group set up by CPM-12 (2017) (COSAVE, Australia, Europe and Japan) to develop a compromise on the reorganization on the fruit flies ISPMs agreed with the change proposed by the EU.
[48]	• target fruit fly species and its/their seasonal and spatial distribution within the area	
[49]	• location, abundance and seasonality of hosts, including, wherever possible, specification of primary (biologically preferred) hosts	
[50]	• climatic characteristics, including rainfall, relative humidity, temperature, and prevailing wind speed and direction	
[51]	• factors limiting and keeping fruit fly population(s) at low levels.	Editorial correction (the factors not the identification of them are elements to be considered; plural option consistent with list item 3, "its/their").
[52]	In areas where the prevalence of fruit flies is naturally at a low level because of climatic, geographical or other reasons (e.g. natural enemies, availability of suitable hosts, host seasonality), the target fruit fly population may already be below the specified level of low pest prevalence without applying any control measures. In such cases, surveillance	Consequential change. The panel agreed that the cross-reference to ISPM 8 section 3.1.1 was not fully appropriate because only one of the examples in this section would be applicable. Rather, the panel felt that a general reference to ISPM here was

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	should be undertaken over an appropriate length of time to validate the low pest prevalence status and this status may be recognized in accordance with ~~with the examples listed in section 3.1.1 of~~ ISPM 8 (*Determination of pest status in an area*)~~:1998~~. If, however, the fruit flies are detected above the specified level of low pest prevalence (e.g. because of extraordinary climatic conditions) corrective actions should be applied. Corrective action plans are described in ~~Annex 2~~section 8 of this annex.	helpful because determination of status is dealt with throughout ISPM 8. Editorial corrections. Change to avoid use of "guidelines".
[53]	**~~1.~~3. Documentation and Record Keeping**	Editorial correction.
[54]	The phytosanitary procedures used for the determination, establishment, verification and maintenance of an FF-ALPP should be adequately documented. These procedures should be reviewed and updated regularly, including the corrective actions if required (as described in ISPM 22~~:2005~~). It is recommended that a manual of procedures relating to the operational plan be prepared for the FF-ALPP.	
[55]	Documentation for determination and establishment may include:	
[56]	• list of fruit fly hosts known to occur in the area, including seasonality and commercial fruit production in the area (ISPM 37)	Cross-reference to ISPM on host status added to enhance clarity.
[57]	• delimitation records: detailed maps showing the boundaries, natural barriers and points where fruits may enter the area; description of agro-ecological features such as soil type, the location of main host areas of the target fruit fly, and marginal and urban host areas; and climatic conditions, for example rainfall, relative humidity, temperature, and prevailing wind speed and direction	Editorial correction.
[58]	• surveillance records:	
[59]	- trapping: types of surveys, number and type of traps and lures, frequency of trap inspection, trap density, trap array, trapping time and duration, number of target fruit flies captured by species for each trap, trap servicing (see Appendix 1 of ISPM 26)	Cross-reference added to enhance clarity.
[60]	- fruit sampling: type, quantity, date, frequency and result (see Appendix 2 of ISPM 26)	Cross-reference added to enhance clarity.

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[61]	• record of control measures used for fruit flies and other pests that may have an effect on fruit fly populations: type(s) and location(s).	Editorial correction (for consistency with "type(s)").
[62]	For verification and maintenance, documentation should include the data recorded to demonstrate the population levels of the target fruit fly species are below the specified level of low pest prevalence. The records of surveys and results of other operational procedures should be retained for at least 24 months. If the FF-ALPP is being used for export purposes, records should be made available to the NPPO of the relevant importing country on request and verification may take place if necessary.	
[63]	Corrective action plans should also be developed and maintained (see section ~~2.4~~ 8 of this annex).	Consequential change.
[64]	~~1.~~ **4. Supervision Activities**	Editorial correction.
[65]	The FF-ALPP programme, including applicable domestic regulations, surveillance procedures (e.g. trapping, fruit sampling) and corrective action plans, should comply with officially approved procedures. These procedures may include official delegation of responsibility to key personnel, for example:	Editorial correction ("delegation" and "assigned" are redundant).
[66]	• a person with defined authority and responsibility to ensure that the systems and procedures are implemented and maintained appropriately	
[67]	• entomologist(s) with responsibility for the identification of fruit flies to species level.	
[68]	The NPPO should evaluate and audit the operation of the procedures for the establishment and maintenance of the FF-ALPP to ensure that effective management is maintained even where the responsibility to carry out specific activities has been delegated outside the NPPO. Supervision of operational procedures includes:	Editorial corrections.
[69]	• operation of surveillance procedures	
[70]	• surveillance capability	
[71]	• trapping materials (traps, attractants) and procedures	

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[72]	• identification capability	
[73]	• application of control measures	
[74]	• documentation and record keeping	Editorial correction.
[75]	• implementation of corrective actions.	
[76]	~~**2. Specific Requirements**~~	
[77]	~~**2.1**~~**5. Establishment of an FF-ALPP**	Editorial correction (for consistency of the headings in this annex).
[78]	Elements for consideration when establishing an FF-PFA are described i~~n sections 2.1 and 2.2 of~~ ISPM 26~~:2006~~ and may also be applied to establishing an FF-ALPP, as defined in the following subsections.	The panel felt that it was not needed to refer to the specific sections as ISPM 26 deals with establishment of PFAs throughout and that it would be more helpful to have a more general reference. Editorial corrections.
[79]	~~**2.1**~~**5.1 Determination of the specified level of low pest prevalence**	
[80]	Specified levels of low pest prevalence will depend on the level of risk associated with the target fruit fly species–host–area interaction. These levels should be established by the NPPO of the country where the FF-ALPP is located and with sufficient precision to allow assessment of whether surveillance data and protocols are adequate to determine that pest prevalence is below these levels.	
[81]	Individual NPPOs may draw on a variety of factors when determining exactly what an appropriate level of pest prevalence should be for a given FF-ALPP. Some commonly considered factors include the following:	Editorial correction (redundancy).
[82]	• levels stipulated by trading partners in order for trade to proceed	
[83]	• levels in use by other NPPOs for the same or similar fruit fly species, hosts and agro-ecological conditions (including experience and historical data gained from the operation of other FF-ALPPs as to what levels are required to be maintained to achieve pest free fruits).	Editorial correction.

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[84]	Establishment of the parameters used to estimate the level of fruit fly prevalence is described in Annex 2 of this standard.	Consequential change.
[85]	**~~2.1~~5.2 Geographical description**	
[86]	The NPPO defines the limits of a proposed FF-ALPP. Isolation of the area (physical or geographical) is not necessarily required for the establishment of an FF-ALPP.	Editorial correction.
[87]	Boundaries used to describe the delimitation of the FF-ALPP should be established and closely related to the relative presence of hosts of the target fruit fly species or adjusted to readily recognizable boundaries.	
[88]	**5.3 Surveillance activities before establishment**	Editorial correction.
[89]	Before the establishment of an FF-ALPP, surveillance to assess the presence and level of prevalence of the target fruit fly species should be undertaken for a period determined by its biology and behaviour as well as climatic characteristics of the area, host availability and appropriate technical considerations. This surveillance should continue for at least 12 consecutive months.	Editorial corrections.
[90]	**~~2.2~~6. Phytosanitary Procedures**	Editorial correction.
[91]	**~~2.2~~6.1 Surveillance activities**	
[92]	Surveillance systems based on trapping are similar in any type of area of low pest prevalence. The surveillance used in an FF-ALPP may include those processes described in ISPM 6 (*Guidelines for Surveillance*)~~:1997~~, ~~section 2.2.2.1 on~~ the trapping procedures ~~of~~ described in Appendix 1 of ISPM 26~~:2006~~ and any other relevant scientific information.	
[93]	Fruit sampling is not widely used as a routine surveillance method for monitoring fruit flies in low pest prevalence areas except in areas where sterile insect technique (SIT) is applied, where it may be a major tool (see Appendix 2 of ISPM 26).	Editorial correction.
[94]	The NPPO may complement trapping for adults with fruit sampling for larvae. Fruit	Editorial correction (“alone” removed for consistency with same text in [182]).

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	sampling may be especially useful for surveillance for fruit flies when no traps are available. If larvae are detected by fruit sampling, it may be necessary to rear the larvae to adults in order to identify them. This is the case particularly if multiple species of fruit flies may be present. However, fruit sampling will not provide sufficient accuracy for describing the size of the population and should not be solely relied on to validate or verify the FF-ALPP status. Surveillance procedures may include those fruit sampling procedures described in ~~section 2.2.2.2 on~~ Appendix 2 of ISPM 26 ~~fruit sampling procedures of ISPM 26:2006.~~	
[95]	The presence and distribution of fruit fly commercial and non-commercial hosts should be recorded separately. This information will help in planning trapping and ~~host~~ fruit sampling activities and may help in anticipating the potential ease or difficulty of establishing and maintaining the status of the relevant pest in the FF-ALPP.	Ink amendment for consistency with terminology used in other FF standards. Firstly, fruit is sampled, secondly it is determined if it is a host (i.e. it is not necessarily a host). Editorial corrections (for sense and redundancy). (Note that "phytosanitary status" was changed to "status of relevant pest in the area" as noted by CPM-10 (2015))
[96]	The NPPO should have, or have access to, appropriate identification capabilities for identification of the target fruit fly species detected during the surveys (whether adult or larvae). This capability should also exist for the ongoing verification of FF-ALPP status for the target fruit fly species.	
[97]	**~~2.2~~6.2 Reduction and maintenance of target fruit fly species population level**	
[98]	Specific control measures may be applied to reduce fruit fly populations to or below the specified level of low pest prevalence. Suppression of fruit fly populations may involve the use of more than one control option; some of these are described in ~~section 3.1.4.2 of ISPM 22:2005 and~~ Annex 3 of ISPM 26~~:2006~~.	The panel considered that Annex 3, adopted only in 2015 and therefore not previously included here, was much more relevant as a reference, than both ISPM 22 and Annex 1 of ISPM 26, in this section because of its ample guidance.
[99]	Because the target fruit fly species are either endemic or established in the area, preventive control measures to maintain fruit fly populations at or below the specified level of low pest prevalence are nearly always necessary (some FF-ALPPs may occur naturally). Efforts should be made by NPPOs to select those measures with least environmental impact.	Editorial correction.
[100]	Available methods include:	Editorial correction ("may" not needed in this context of list of available methods that may be *used*, also for consistency with [143]).

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[101]	• chemical control (e.g. selective insecticide bait, aerial and ground spraying, bait stations and male annihilation technique)	
[102]	• physical control (e.g. fruit bagging)	
[103]	• use of beneficial organisms (e.g. natural enemies, SIT)	
[104]	• cultural control (e.g. stripping and destruction of mature and fallen fruit, elimination or replacement of other host plants by non-host plants where appropriate, early harvesting, discouraging intercropping with fruit fly host plants, pruning before the fruiting period, use of perimeter trap hosts).	
[105]	**6~~2.2~~.3 Phytosanitary measures related to movement of host material or regulated articles**	
[106]	Phytosanitary measures may be required to reduce the risk of entry of the specified pests into the FF-ALPP. These are outlined in ~~section 3.1.4.3 of ISPM 22:2005 and~~ Annex 3 of ISPM 26.	The panel considered that Annex 3, adopted only in 2015 and therefore not previously included here, was much more relevant as a reference, than ISPM 22 because of its ample guidance.
[107]	**6~~2.2~~.4 Domestic declaration of an FF-ALPP**	
[108]	The NPPO should verify the status of the FF-ALPP (in accordance with ISPM 8~~:1998~~) specifically by confirming compliance with the procedures established in accordance with this ~~standard~~ annex (surveillance and controls). The NPPO should declare and notify the establishment of the FF-ALPP, as appropriate.	
[109]	For the purposes of internal management, the continuing FF-ALPP status should be verified after it has been established and any phytosanitary measures for the maintenance of the FF-ALPP have been put in place.	Editorial correction (sense).
[110]	**~~2.3~~7. Maintenance of an FF-ALPP**	Editorial correction (for consistency of headings in this annex).
[111]	Once the FF-ALPP is established, the NPPO should maintain the relevant documentation and verification procedures (auditable), and continue the application of phytosanitary procedures as described in section ~~2.2~~ 6 of this ~~standard~~ annex.	Consequential change.

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[112]	**~~2.3~~7.1 Surveillance**	
[113]	In order to maintain the FF-ALPP status, the NPPO should continue surveillance, as described in section ~~2.2.1~~ 6.1 of this ~~standard~~ annex.	Consequential change.
[114]	**~~2.3~~7.2 Control measures to maintain low prevalence levels of target fruit fly species**	Editorial corrections.
[115]	In most cases the control measures identified in section ~~2.2.2~~ 6.2 of this annex may be applied to maintain the FF-ALPP, because the target fruit flies are still present in the established area.	Consequential change. Editorial corrections.
[116]	If the monitored fruit fly prevalence level is observed to be increasing (but remains below the specified level for the area), a threshold set by the NPPO for the application of additional control measures may be reached. At this point the NPPO may require implementation of such measures as described in Annex 3 of ISPM 26~~e.g. as described in section 3.1.4.2 of ISPM 22:2005~~. This threshold should be set to provide adequate warning that the specified level of low pest prevalence will potentially be exceeded and therefore avert suspension.	The panel considered that Annex 3, adopted only in 2015 and therefore not previously included here, was much more relevant as a reference in this section than ISPM 22 because of its ample guidance. Editorial corrections.
[117]	**8.~~2.4~~ Corrective Action Plans**	Ex ISPM 30 Annex 2 (indicated in green text) was merged into the section on corrective action plans. This is therefore not new text (and should not be edited), but is new in this standard. The panel considered adding the full heading of ex Annex 2 ("guidelines on corrective action plans for fruit flies in an FF-ALPP) but agreed instead to keep the simple title. First, this would be consistent with Annex 1 of ISPM 26 and second, because this section is within the annex on FF-ALPP, the specification was deemed superfluous. Editorial correction.
[118]	A corrective action plan for the FF-ALPP should be applied by the NPPO when the population level of the target fruit fly exceeds the specified level of low pest prevalence. ~~Annex 2 provides guidelines on corrective action plans for FF-ALPPs.~~	Reference to Annex 2 deleted as section 8 has been expanded to include all the information previously contained in Annex 2.
[119]	**8.1 Preparation of the corrective action plan** Faults in the phytosanitary procedures or their application (e.g. inadequate trapping or pest control measures, inadequate documentation) or the detection of a population level	Heading added for clearer structure now that the ex ISPM 30 Annex 2 has been incorporated into this annex.

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	exceeding the specified level of low pest prevalence for the target fruit fly species in the FF-ALPP should trigger the implementation of a corrective action plan. The objective of the corrective action plan is to ensure procedures and their applications are adequate and suppression of the fruit fly population to below the specified level for low pest prevalence is achieved as soon as possible. It is the responsibility of the NPPO to ensure that appropriate corrective action plans are developed. Corrective action plans should not be repeatedly implemented because this may lead to a ~~loss~~ revocation of FF-ALPP status and the need to re-establish the area in accordance with the guidance in this ~~standard~~annex.	Consequential change of "loss" to "revocation". Editorial correction ("faults in the phytosanitary procedures"; a plan is not "applied", and "implementation" is used at [121]; to avoid use of "guidelines").
[120]	The corrective action plan should be prepared taking into account the biology of the target fruit fly species, the geography of the FF-ALPP, climatic conditions, phenology, and host abundance and distribution within the area.	
[121]	The elements required for implementation of a corrective action plan include:	
[122]	• a declaration of suspension of FF-ALPP status, where appropriate	Editorial correction.
[123]	• a legal framework under which the corrective action plan can be applied	Editorial correction.
[124]	• time frames for the initial response and follow-up activities	Editorial correction.
[125]	• a delimiting survey (trapping and fruit sampling) and application of the suppression actions	Editorial correction.
[126]	• identification capability	
[127]	• the availability of sufficient operational resources	
[128]	• effective communication within the NPPO and with the NPPO(s) of the relevant importing country(ies), including provision of contact details of all parties involved	
[129]	• a detailed map and definition of the suspension area	
[130]	• revision and rectification of operational procedures	Editorial correction.

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[131]	• a range of control measures (e.g. pesticides).	Editorial correction.
[132]	**8.2 Implementation of the corrective action plan**	Editorial correction (numbering was out of sequence; see note at [119]).
[133]	8.2.1 *Notice to implement corrective actions*	Editorial correction (this level of heading should be numbered).
[134]	The NPPO notifies interested stakeholders and parties, including relevant importing countries, when initiating the implementation of a corrective action plan. The NPPO is responsible for supervising the implementation of corrective measures.	Editorial correction.
[135]	Notification should include the reason for initiating the implementation of the plan; that is, faulty procedures found or the specified level of low pest prevalence exceeded.	Editorial correction (for consistency because applying the plan, implementing the plan, initiating the plan have all been used).
[136]	8.2.2 *Determination of the pest status*	(Note that "phytosanitary status" was changed to "pest status" as noted by CPM-10 (2015))
[137]	Immediately after detecting a population level higher than the specified level of low pest prevalence, a delimiting survey (which may include the deployment of additional traps, fruit sampling of host fruits and increased trap inspection frequency) should be carried out to determine the size of the affected area and more precisely gauge the level of the fruit fly prevalence.	Editorial correction (a survey is not really "implemented").
[138]	8.2.3 *Suspension of FF-ALPP status*	
[139]	If the specified level of low pest prevalence of the target fruit fly species is exceeded or faulty procedures are found, the FF-ALPP status should be suspended as stated in section ~~2.5.~~9.1 of this ~~standard~~ annex.	Consequential change.
[140]	8.2.4 *Rectification of procedural faults*	
[141]	Faulty procedures and associated documentation should be immediately reviewed to identify the source of the fault(s). The source and corrective action taken should be documented and the modified procedures monitored to ensure compliance with the objectives of the FF-ALPP.	
[142]	8.2.5 *Implementation of control measures in the affected area*	

Para. No.	Proposal for consistency change (underline = addition; strikethrough = deletion)	Explanation for change
[143]	Specific suppression actions should immediately be implemented in the affected area(s). Available methods include:	
[144]	• selective insecticide bait treatments (aerial and/or ground spraying and bait stations)	Editorial correction.
[145]	• SIT	Editorial correction (SIT has been define earlier in the annex so the abbreviation should be used).
[146]	• male annihilation technique	
[147]	• collection and destruction of affected fruit	
[148]	• stripping and destruction of host fruits, if possible	
[149]	• insecticide treatments (ground, cover).	
[150]	8.2.6 *Notification of relevant agencies*	
[151]	Relevant NPPOs and other agencies should be kept informed of corrective actions. Information on pest reporting requirements under the IPPC is provided in ISPM 17 (*Pest reporting*)~~:2002~~.	
[152]	**~~2.5~~9. Suspension, Reinstatement and ~~loss R~~evocation of FF-ALPP status**	Change in consistency with ISPM 26 changes. Editorial correction.
[153]	**~~2.5~~9.1 Suspension ~~of FF-ALPP status~~**	Headings aligned with the analogous headings in ISPM 26.
[154]	If the specified level of low pest prevalence of the target fruit fly species is exceeded either throughout the whole FF-ALPP or within a part of the FF-ALPP, the entire FF-ALPP is normally suspended. However, where the affected area within the FF-ALPP can be identified and clearly delimited, the FF-ALPP may be redefined to suspend only that area.	Editorial correction (“A” in “ALPP” is “area” so it’s incorrect to say “ALPP area”).
[155]	Relevant importing NPPOs should be notified without undue delay of these actions (further information on pest reporting requirements is provided in ISPM 17~~:2002~~).	

Para. No.	Proposal for consistency change (underline = addition; strikethrough = deletion)	Explanation for change
[156]	Suspension may also apply if faults in the application of the procedures are found (e.g. inadequate trapping, pest control measures or documentation).	Editorial correction.
[157]	If an FF-ALPP is suspended, an investigation by the NPPO should be initiated to determine the cause of the failure and introduce measures to prevent such failures from reoccurring.	
[158]	When an FF-ALPP is suspended, the criteria for reinstatement should be made clear.	
[159]	~~2.5~~9.2 **Reinstatement ~~of FF-ALPP status~~**	
[160]	Reinstatement of FF-ALPP status applies only to suspended areas and may take place when one or both of these criteria have been met:	Editorial correction (to address problem at [161]).
[161]	• the population level no longer exceeds the specified level of low pest prevalence and this is maintained for a period determined by the biology of the target fruit fly species and the prevailing environmental conditions	Editorial correction.
[162]	• faulty procedures have been corrected and verified.	
[163]	Once the specified level of low pest prevalence has been achieved and maintained and/or procedural faults have been rectified through the application of corrective actions contained in the plan, the FF-ALPP status can be reinstated. If the FF-ALPP is established for export of host fruits, records regarding the reinstatement should be made available to the NPPO(s) of the relevant importing country(ies) on request and verification may take place if necessary.	Editorial correction ("as required above" does not make sense, possibly "as described above, but it's not necessary; "and/or" in line with []160]/[161]; option for plural NPPOs as for plural countries).
[164]	~~2.5~~9.3 ~~Loss~~ **Revocation ~~of FF-ALPP status~~**	Change in consistency with ISPM 26 changes.
[165]	~~Loss of~~ The FF-ALPP status should ~~occur~~ be revoked after suspension if reinstatement has failed to take place within a justifiable time frame, taking into account the biology of the fruit fly target species. Relevant importing NPPOs should be notified without undue delay of the change in status of the FF-ALPP (further information on pest reporting requirements is provided in ISPM 17).	
[166]	In the event that FF-ALPP status is ~~lost~~ revoked, the procedures for establishment and maintenance outlined in this ~~standard~~annex should be followed to achieve the FF-ALPP	

Para. No.	Proposal for consistency change (underline = addition; strikethrough = deletion)	Explanation for change
	status again, and should take into account all background information related to the area.	
[167]	This annex is a prescriptive part of the standard.	
[168]	**ANNEX ~~1~~2: Parameters used to estimate the level of fruit fly prevalence**	
[169]	Parameters used to determine the level of fruit fly prevalence in the FF-ALPP are defined by the NPPO. The most widely used parameter is flies per trap per day (FTD). More precise spatial data may be presented on the basis of trap density (i.e. FTD per unit area) or temporally for each trap present in an area over time.	
[170]	FTD is an index used to estimate the population by averaging the number of flies captured by one trap in one day. This parameter estimates the relative number of fruit fly adults in a given time and space. It provides baseline information to compare fruit fly populations in different places and/or across time.	Editorial corrections.
[171]	The FTD index is the result of dividing the total number of captured flies (F) by the product obtained from multiplying the total number of inspected traps (T) by the average number of days the traps were exposed in the field (D). The formula is as follows:	Editorial corrections (to remove redundancy with [173] to [176] and to match [217] in Appendix 1 of ISPM 26].
[172]	$\frac{F}{T \times D}$	
[173]		
[174]		
[175]		
[176]		
[177]	In cases where traps are regularly inspected on a weekly basis, or longer in the case of winter surveillance operations, the parameter may be “flies per trap per week” (FTW). FTW estimates the number of flies captured by one trap in one week. FTD can be obtained from FTW by dividing by seven. Any significant changes in the status of any parameters critical to the efficacy of the FF-ALPP should be reviewed and modified, as	Editorial corrections.

Para. No.	Proposal for consistency change (underline = addition; strikethrough = deletion)	Explanation for change
	appropriate.	
[178]	Specified levels of low pest prevalence, as expressed in FTD values, should be established in relation to the risk of infestation of the fruits that are intended to be protected by the FF-ALPP, and in relation to any specific related objectives of the FF-ALPP (e.g. fruit fly free commodities for export). In situations where a single FF-ALPP contains more than one host species (i.e. the ALPP is intended to protect more than one target fruit fly host), the specified level of low pest prevalence should be based on scientific information relating to each host of the fruit fly species, and the risks of infestation and comparative preferences of the target fruit fly species for the different hosts. However, in situations where the FF-ALPP is established to protect only one type of host, consideration should be given to the level of infestation expected on that host. In such situations, lower specified levels of low pest prevalence are usually established for the primary hosts of the target fruit fly species and comparatively higher levels for secondary hosts.	Editorial corrections.
[179]	The biology of the target fruit flies (including number of generations per year, host range, host species present in the area, temperature thresholds, behaviour, reproduction and dispersion capacity) plays a major role in establishing appropriate specified levels of low pest prevalence. For an FF-ALPP with several hosts present, the established specified levels of low pest prevalence should reflect host diversity and abundance, host preference and host sequence for each target fruit fly species present. Although an FF-ALPP may have different specified levels of low pest prevalence for each relevant fruit fly target species, those levels should remain fixed for the whole area and duration of the FF-ALPP operation.	
[180]	The efficiency of the types of traps and attractants used to estimate the levels of the pest population and the procedures applied for servicing the traps should be taken into consideration. The rationale is that different trap efficiencies could lead to different FTD results at the same location for a given population, so they have a significant effect on measuring the prevalence level of the target fruit fly species. Thus, when specifying the level of low pest prevalence accepted in terms of an FTD value, the efficacy of the trapping system should be stated as well.	Editorial corrections.
[181]	Once a specified level of low pest prevalence has been established for a given situation using a specific lure or attractant, the lure or attractant used in the FF-ALPP must not be changed or modified until an appropriate specified level of low pest prevalence is determined for the new formulation. For FF-ALPPs with multiple target fruit fly species	Editorial correction to avoid the use of "/".

Para. No.	Proposal for consistency change (underline = addition; strikethrough = deletion)	Explanation for change
	present that are attracted to different lures/attractants, trap placement should take into consideration possible interactive effects between them.	
[182]	Fruit sampling can be used as a complementary surveillance method to trapping to assess the profile of the fruit fly population levels, particularly if traps are not available for target species. Fruit sampling should be done on known hosts. It should be taken into account that efficacy of fruit sampling depends on sample size, frequency and timing. Fruit sampling may include rearing larvae to identify the fruit fly species. If fruit cutting is done, the efficacy of visually detecting larvae should be considered. However, fruit sampling will not provide sufficient accuracy for describing the size of the population and should not be solely relied on to validate or verify the FF-ALPP status.	
[183]	~~This annex is a prescriptive part of the standard~~.	
[184]	~~ANNEX 2: Guidelines on corrective action plans for fruit flies in an FF-ALPP~~	"Guidelines on" and "for fruit flies in an FF-ALPP" were not incorporated into section 8 in line with the SC decision to avoid using "guidelines" in titles of ISPMs (and hence also heading) and for consistency with Annex 1 of ISPM 26.
[185]	~~Faults in the procedures or their application (e.g. inadequate trapping or pest control measures, inadequate documentation) or the detection of a population level exceeding the specified level of low pest prevalence for the target fruit fly species in the FF-ALPP should trigger the application of a corrective action plan. The objective of the corrective action plan is to ensure procedures and their applications are adequate and suppression of the fruit fly population to below the specified level for low pest prevalence is achieved as soon as possible. It is the responsibility of the NPPO to ensure that appropriate corrective action plans are developed. Corrective action plans should not be repeatedly implemented because this may lead to a loss of FF-ALPP status and the need to re-establish the area in accordance with the guidelines of this standard.~~	
[186]	~~The corrective action plan should be prepared taking into account the biology of the target fruit fly species, the geography of the FF-ALPP, climatic conditions, phenology, and host abundance and distribution within the area.~~	
[187]	~~The elements required for implementation of a corrective action plan include:~~	

Para. No.	Proposal for consistency change (underline = addition; strikethrough = deletion)	Explanation for change
[188]	• ~~declaration of suspension of FF-ALPP of status, where appropriate~~	
[189]	• ~~legal framework under which the corrective action plan can be applied~~	
[190]	• ~~time scales for the initial response and follow-up activities~~	
[191]	• ~~delimiting survey (trapping and fruit sampling) and application of the suppression actions~~	
[192]	• ~~identification capability~~	
[193]	• ~~availability of sufficient operational resources~~	
[194]	• ~~effective communication within the NPPO and with the NPPO(s) of the relevant importing country(ies), including provision of contact details of all parties involved~~	
[195]	• ~~a detailed map and definition of the suspension area~~	
[196]	• ~~revision and rectification of operational procedures, or~~	
[197]	• ~~range of control measures available e.g. pesticides.~~	
[198]	~~**Application of the corrective action plan**~~	
[199]	~~(1) *Notice to implement corrective actions*~~	
[200]	~~The NPPO notifies interested stakeholders and parties, including relevant importing countries, when initiating the application of a corrective action plan. The NPPO is responsible for supervising the implementation of corrective measures.~~	
[201]	~~Notification should include the reason for initiating the plan i.e. faulty procedures or exceeding the specified level of low pest prevalence.~~	
[202]	~~(2) *Determination of the phytosanitary status*~~	

Para. No.	Proposal for consistency change (underline = addition; strikethrough = deletion)	Explanation for change
[203]	~~Immediately after detecting a population level higher than the specified level of low pest prevalence, a delimiting survey (which may include the deployment of additional traps, fruit sampling of host fruits and increased trap inspection frequency) should be implemented to determine the size of the affected area and more precisely gauge the level of the fruit fly prevalence.~~	
[204]	~~(3) *Suspension of FF-ALPP status*~~	
[205]	~~If the specified level of low pest prevalence of the target fruit fly species is exceeded or faulty procedures are found, the FF-ALPP status should be suspended as stated in section 2.5.1 of this standard.~~	
[206]	~~(4) *Rectification of procedural faults*~~	
[207]	~~Faulty procedures and associated documentation should be immediately reviewed to identify the source of the fault(s). The source and corrective action taken should be documented and the modified procedures monitored to ensure compliance with the objectives of the FF-ALPP.~~	
[208]	~~(5) *Implementation of control measures in the affected area*~~	
[209]	~~Specific suppression actions should immediately be implemented in the affected area(s). Available methods include:~~	
[210]	~~• selective insecticide-bait treatments (aerial and/or ground spraying and bait stations)~~	
[211]	~~• sterile insect technique~~	
[212]	~~• male annihilation technique~~	
[213]	~~• collection and destruction of affected fruit~~	
[214]	~~• stripping and destruction of host fruits, if possible~~	
[215]	~~• insecticide treatments (ground, cover).~~	

Para. No.	Proposal for consistency change (underline = addition; strikethrough = deletion)	Explanation for change
[216]	~~*(6) Notification of relevant agencies*~~	
[217]	~~Relevant NPPOs and other agencies should be kept informed of corrective actions. Information on pest reporting requirements under the IPPC is provided in ISPM 17:2002.~~	
[218]	~~This appendix is for reference purposes only and is not a prescriptive part of the standard.~~	
[219]	~~**APPENDIX 1: Guidelines on trapping procedures**~~	Deleted as this appendix was a duplication of Appendix 1 of ISPM 26, which has elaborated text and was adopted more recently. The relevant cross-reference was added in the text of the annex.
[220]	~~Information about trapping is available in the following publication of the International Atomic Energy Agency (IAEA):~~	
[221]	~~**IAEA**. 2003. *Trapping guidelines for area-wide fruit fly programmes*. Vienna, Austria, Joint FAO/IAEA Division. 47 pp.~~	
[222]	~~This publication is widely available, easily accessible and generally recognized as authoritative.~~	
[223]	This appendix is for reference purposes only and is not a prescriptive part of the ~~standard~~annex.	
[224]	**APPENDIX ~~2~~1 OF ANNEX 1: Typical applications of an FF-ALPP**	
[225]	**1. FF-ALPPs as Buffer Zones**	Editorial correction.
[226]	In cases where the biology of the target fruit fly species is such that it is likely to disperse from an infested area into a protected area, it may be necessary to define a buffer zone with a low fruit fly prevalence (as described in ISPM 26). Establishment of the FF-ALPP and FF-PFA should occur at the same time, enabling the FF-ALPP to be defined for the purpose of protecting the FF-PFA.	Editorial correction.
[227]	**1.1 Determination of an FF-ALPP as a buffer zone**	

Para. No.	Proposal for consistency change (underline = addition; strikethrough = deletion)	Explanation for change
[228]	Determination procedures draw upon those listed in section ~~1.~~2 of this ~~standard~~ annex. In addition, in delimiting the buffer zone, detailed maps may be included showing the boundaries of the area to be protected, the distribution of hosts, host location, urban areas, ~~points of~~ entry points and control checkpoints. It is also relevant to include data related to natural biogeographical features such as incidence of other hosts, climate, and location of valleys, plains, deserts, rivers, lakes and sea, as well as other areas that function as natural barriers. The size of the buffer zone in relation to the size of the area being protected will depend on the biology of the target fruit fly species (including behaviour, reproduction and dispersal capacity), the intrinsic characteristics of the protected area, and the economic and operational feasibility of establishing the FF-ALPP.	Consequential change. Editorial corrections. On "prevalence" the IPPC Style Guide says: The word "prevalence" only exists in the Glossary within the term "area of low pest prevalence". It should only be used in this context. Use of the term "prevalence" on its own should be avoided, as it is sometimes wrongly used in draft ISPMs to mean "incidence" (a term that is defined in the Glossary). In CPM 2017/INF/11, the EU and its 28 Members States considered that the substitution of the term "entry points" by the Glossary term "points of entry" should not be made, because, according to the General recommendations on use of terms in ISPMs, "point of entry" should not be used in relation to entrance points into a pest free area (PFA) or an area of low pest prevalence (ALPP). The small group set up by CPM-12 (2017) (COSAVE, Australia, Europe and Japan) to develop a compromise on the reorganization on the fruit flies ISPMs agreed with the change proposed by the EU.
[229]	**1.2 Establishment of an FF-ALPP as a buffer zone**	
[230]	The establishment procedures are described in section 5~~2.1~~ of this ~~standard~~ annex. The movement of relevant fruit fly host commodities into the area may need to be regulated. Additional information can be found in ~~section 2.2.3 of~~ ISPM 26~~:2006~~.	Consequential change.
[231]	**1.3 Maintenance of an FF-ALPP as a buffer zone**	
[232]	Maintenance procedures include those listed in section 7 ~~2.3~~ of this ~~standard~~ annex. Because the buffer zone has features similar to the area or place of production it protects, procedures for maintenance may include those listed for the FF-PFA as described in ~~section 2.3 of~~ ISPM 26~~:2006~~ and ~~sections 3.1.4.2, 3.1.4.3 and 3.1.4.4 of~~ ISPM 22~~:2005~~. The importance of information dissemination may also be considered in the maintenance of an FF-ALPP as a buffer zone.	Consequential change. Cross-reference to sections was deleted as the panel felt it was clear where to look for guidance in ISPM 26 and ISPM 22 respectively. Editorial correction.
[233]	**2. FF-ALPPs for Export Purposes**	Editorial correction.
[234]	FF-ALPPs may be used to facilitate fruit exports from the area. In most cases the FF-	

Para. No.	Proposal for consistency change (underline = addition; strikethrough = deletion)	Explanation for change
	ALPP is the main component of a systems approach as a pest risk mitigation measure. Examples of measures and/or factors used in conjunction with FF-ALPPs include:	
[235]	• pre- and post-harvest treatments	
[236]	• production of secondary hosts or non-hosts in preference to primary hosts	
[237]	• export of host material to areas not at risk during particular seasons	
[238]	• physical barriers (e.g. pre-harvest bagging, insect-proof structures).	
[239]	**2.1 Determination of an FF-ALPP for export purposes**	
[240]	Determining procedures may include those listed in section ~~1.~~2 of this ~~standard~~ annex. In addition, the following elements should be considered for the determination of an FF-ALPP for export purposes:	Consequential change. Editorial correction (for clarity).
[241]	• products (hosts) of interest	Editorial correction.
[242]	• other commercial and non-commercial hosts of the target fruit fly species present but not intended for export and their level of occurrence, as appropriate	Editorial correction.
[243]	• historical records in connection with biology, occurrence and control of the target fruit fly species or any other fruit fly species that may be present in the FF-ALPP, and any other information, as appropriate.	Editorial correction.
[244]	**2.2 Maintenance of an FF-ALPP for export purposes**	
[245]	Maintenance procedures may include those described in ~~section 2.3.~~7.2 of this ~~standard~~ annex and should be applied if hosts are available. If appropriate, surveillance may continue at a lower frequency during the off-season period. The frequency will depend on the biology of the target fruit fly species and its relationship with hosts present during the off-season period.	Consequential change. Editorial correction.