



IPPC STRATEGIC FRAMEWORK
2020-2030

DEVELOPMENT AGENDA ITEMS
OVERARCHING IMPLEMENTATION
PLAN

March 2023

Executive Summary

The Strategic Framework for the International Plant Protection Convention (IPPC) 2020-2030 sets out the strategic objectives and the priorities of the Commission of Phytosanitary Measures over this decade. The work priorities include the core activities of the IPPC, but they also include eight new development agenda items (DAIs or work programmes). These were identified based on the anticipated changes to the operational environment of national, regional, and global plant protection organizations, and the associated opportunities and challenges. The DAIs are designed to address the real needs of National Plant Protection Organizations (NPPOs) and are to make a tangible difference to the countries NPPOs serve. They will also deliver positive progress against the IPPC strategic objectives.

It was recognised early on that the Strategic Framework is highly ambitious and that there would be a need to sequence and carefully plan the implementation of the DAIs. CPM 15 in 2021 agreed to establish a CPM Focus Group to develop an overarching implementation plan. This focus group has been working with the IPPC Secretariat since September 2021 to agree the DAI start dates, milestones, activities, timelines, estimations of required budget and resources, sequencing, and monitoring and review.

The development of long-term plans for each of the DAIs allowed the CPM Focus Group to sequence the various activities and ensure that the IPPC Secretariat and other bodies would not become overwhelmed over the course of delivering the Strategic Framework. Five of the eight DAIs are already being delivered and should continue. Recommendations for the timeframe of the other three DAIs and the phasing of all DAIs are provided and summarized here:

- 1. Harmonization of electronic data exchange** – This should continue in Delivery phase until sustainable funding arrangements are in place, then reviewed to see if the DAI can transition to ongoing core activity.
- 2. Commodity- and pathway-specific ISPMs** – This should continue in Delivery phase until at least two ISPM 46 annexes have been adopted by CPM. This will enable lessons to be learnt and the standard setting process to be adjusted, if necessary, to support prioritization of commodity-specific topics and development of commodity-specific annexes to ISPM 46.
- 3. Management of e-commerce and postal and courier pathways** – This should continue in Delivery phase until an IPPC Observatory-type study has been completed and findings have been implemented into the work programme.
- 4. Developing guidance on the use of third-party entities** – Work on developing initial guidance by the IC may be able to commence in 2024. However, in 2025 a full scoping and planning exercise should be done to understand the needs of NPPOs who both support and do not support the use of third-party entities. This could provide the basis for a comprehensive implementation plan. Subject to CPM approval of the implementation plan, delivery can occur followed by a review.
- 5. Strengthening pest outbreak alert and response systems** – The CPM Focus Group anticipates CPM approval of a revised POARS plan at CPM-18 (2024), at which point this DAI should immediately

enter Delivery phase. When satisfied the programme is functioning well, there could be a review as to whether the programme should transition to Ongoing core activity.

- 6. Assessment and management of climate change impacts on plant health** – This should continue in Delivery phase. The CPM Focus Group anticipates once the 2022-2025 action plan has been delivered, CPM may want to build off the work done. At that point, there should be a review of whether further project-based work should be established, with recommendations presented to CPM.
- 7. Global phytosanitary research coordination** – The CPM Focus Group recommends not starting this development agenda item until 2025 at the earliest. During the Scope and Plan phase, a study should be conducted to build an understanding of the coordination mechanisms that already exist and what gaps the IPPC Secretariat could fill (or whether existing mechanisms are sufficient). The continuation of the DAI will be subject to a CPM decision.
- 8. Diagnostic laboratory networking** – The CPM Focus Group recommends the Scope and Plan phase should commence soon (2024) with the establishment of a focus group to work with the IPPC Secretariat. We expect this to take two years before a viable proposal with enough detail is presented to CPM for approval.

Budgets have been developed for each DAI. They have been built bottom-up by estimating the resources required to deliver the milestones. Budgets include secretariat resources, contract costs, publication costs etc. Total indicative cost of the DAI programme is approximately \$17.9 million over the next 8 years (including 2023). Half the budget cost is for the ePhyto Solution for which a sustainable funding mechanism is being developed. Annually, the cost of the programme ranges from \$0.85 – 1.13 million per annum (excluding the ePhyto Solution).

Ownership of the overarching implementation plan for the Strategic Framework DAIs rests with the Commission on Phytosanitary Measures (CPM). As the CPM's executive body, between CPM meetings, the CPM Bureau will provide oversight and strategic direction for the overarching implementation plan. Each DAI should have its own implementation group and be supported by one or more members of the IPPC Secretariat.

To ensure the overarching implementation plan is progressing well and remains fit for purpose, the plan will be reviewed on a regular basis. These reviews should include plan refreshes prior to the start of each FAO biennium and a more substantial review half-way through the Strategic Framework period. These reviews will be carried out using monitoring and review plans that are developed for each DAI and for the entire overarching implementation plan. Progress against milestones and deliverables will be regularly reported to the CPM Bureau and other relevant groups.

The overarching implementation plan should be accompanied by an investment prospectus, which will be used to raise awareness of the overarching implementation plan to contracting parties, RPPOs and other relevant international bodies, and be used as information material for donor organisations, including funding decision-makers in contracting parties, to attract funding for the DAIs.

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Background and Introduction

Non-native plant pests threaten the health of the world's plants. Some of these, such as *Spodoptera frugiperda* (fall armyworm) and tomato brown rugose fruit virus, impact food security and economic prosperity, while others, such as *Agrilus planipennis* (emerald ash borer) and *Anoplophora glabripennis* (Asian longhorn beetle), impact the productivity and biodiversity of forests and the wild flora of the natural environment. The likelihood of these pests being introduced into new countries has increased with the globalisation of trade, as the volume and diversity of plants, plant products and other objects moving around the world has grown. The risk has also increased with climate change, as the climate of parts of the world has become more suitable for the establishment and spread of non-native species, and new trade pathways have opened due to global changes in plant distribution and production.

It is therefore more important than ever that we tackle this issue with a coordinated global effort. This is recognised in the Strategic Framework for the International Plant Protection Convention (IPPC) 2020-2030, which sets out the following mission, vision, goal and strategic objectives:

Mission – Protect global plant resources and facilitate safe trade

Vision – The spread of plant pests is minimized and their impacts within countries are effectively managed

Goal – All countries have the capacity to implement harmonized measures to prevent pest introductions and spread, and minimize the impacts of pests on food security, trade, economic growth, and the environment

Strategic Objectives –

- A. Enhance global food security and increase sustainable agricultural productivity
- B. Protect forests and the environment from the impacts of plant pests
- C. Facilitate safe trade and economic growth

These will be achieved in part through the core activities of the IPPC, including:

- development of international standards recognized by the WTO-SPS agreement as providing technically justified and harmonized phytosanitary measures for trade to manage the pest and disease risks to plants;
- implementation of standards and capacity development by contracting parties, using the phytosanitary capacity development tool, production of guidance materials and coordination of training; and
- communication of the IPPC's principles and the importance of protecting plants from plant pests.

The strategic framework also outlines eight new development agenda items (DAIs or work programmes) aligned to the mission, vision, goal and strategic objectives. These have been identified based on the anticipated changes to the operational environment of national, regional, and global plant protection organizations, and the associated opportunities and challenges. They are designed to deliver tangible benefits to implementing countries. In brief, these eight DAIs are:

1. **Harmonization of electronic data exchange** – A global system for production and exchange of electronic phytosanitary certificate information.
2. **Commodity- and pathway-specific ISPMs** – The adoption and implementation of international standards for specific commodities and pathways, with accompanying diagnostic protocols and phytosanitary treatments to support implementation.
3. **Management of e-commerce and postal and courier pathways** – A coordinated international effort to substantially reduce the spread of pests and pest host material sold through e-commerce and distributed through mail and courier pathways.
4. **Developing guidance on the use of third-party entities** – The implementation of ISPM 45 Requirements for national plant protection organizations using third party entities to perform phytosanitary actions.
5. **Strengthening pest outbreak alert and response systems** – A system to evaluate and communicate timely information on emerging pest risks and assist countries to secure funds, expertise, and resources to respond quickly and effectively to an outbreak.
6. **Assessment and management of climate change impacts on plant health** – To raise awareness of climate change impacts on plant health; enhance how these impacts are evaluated and managed in plant health; and raise the profile of these impacts in the international climate change debate.
7. **Global phytosanitary research coordination** – An analysis of international phytosanitary research structures and policies to explore how improved international coordination of plant health research could help countries to avoid overlap in research activities and to utilize research resources in the most efficient and effective manner.
8. **Diagnostic laboratory networking** – Establishing a network of diagnostic laboratory services and diagnostic protocols to help countries identify pests in a more reliable and timely manner.

These DAIs are ambitious, complex, and will require additional funding and resources to complete. All have the potential to significantly advance IPPC Strategic Objectives, though some will be more complex or difficult for the IPPC to implement than others. The implementation challenge will also vary for individual countries e.g., some countries may find it straightforward to connect to the ephyto solution, while others may find it a major challenge.

This document sets out how each of these DAIs will be achieved as part of an overarching implementation plan. The plan includes clear milestones and activities with realistic timeframes for each item, and the funding and resources needed for completion. Given the competing demands of the IPPC Secretariat and contracting parties, these DAIs cannot all be carried out simultaneously, so this plan also describes how they will be sequenced until 2030.

Developing the Implementation Plan

The DAIs in the Strategic Framework for the International Plant Protection Convention (IPPC) 2020-2030 present great opportunities to progress the mission of the IPPC and to deliver tangible benefits to implementing countries. However, work on these DAIs is dependent on adequate funding and resources being secured. Without significant cuts in the existing core work programme of the IPPC, regular programme funds are inadequate to deliver the strategic initiatives within reasonable timeframes. Additional funds must be sourced from either: the FAO, contracting party contributions, donor organisations, or new funding arrangements (e.g., a new mechanism to reimburse the cost of delivering the ePhyto solution). NPPO resourcing is also an issue, as often the capacity and capability of contracting parties to engage with IPPC activities is limited when balanced against other priorities within their countries. This often means the bulk of the work rests with the IPPC Secretariat and a small number of countries.

When the Strategic Framework was presented to CPM-14 in 2019, a paper proposing a high-level five-year budget for the IPPC Secretariat was presented and noted by the CPM but not taken further. However, some contracting parties recommended a detailed and costed operational plan should be developed for the implementation of the entire Strategic Framework 2020 - 2030.

The Strategic Planning Group (SPG) in 2020 also highlighted the need to sequence and carefully plan the implementation of the DAIs. CPM 15 in 2021 therefore agreed to establish a CPM Focus Group to develop an overarching implementation plan, with clear DAI start dates, milestones, timelines, monitoring and evaluation frameworks, and estimations of required budget and resources.

The CPM Focus Group was established in September 2021 and included representatives from NPPOs of the FAO regions, one representative from the ten RPPOs, one representative from the CPM Bureau, one representative from the Standards Committee, and one representative from the Implementation and Capacity Development Committee (see Appendix C). Members of the IPPC Secretariat also provided support to the group.

Many DAIs had already started, some were well advanced, and others had not yet started. Some had funding and short-term plans in place while others had yet to begin. No DAIs had clear goals, deliverables, or budgets over the long-term. Typically planning did not extend beyond a two-year horizon. The CPM Focus Group worked with the IPPC Secretariat, subsidiary bodies, other focus groups and steering committees to develop more detailed long-term plans for each of the DAIs. This involved the following stages:

1. The IPPC Secretariat prepared a summary of the current state of DAIs
2. The CPM Focus Group brainstormed milestones and activities for the DAIs to inform planning
3. The CPM Focus Group developed two templates to capture planning information for the DAIs: a high-level planning template, which included information on the delivery groups, stage of implementation, outcomes, issues and risks; and a milestones and resources template, which included information on the milestones, activities, funding and resources
4. The CPM Focus Group worked with the IPPC Secretariat and other relevant bodies to fill in the templates
5. The CPM Focus Group and IPPC Secretariat used the information in these templates to plan out the DAIs to 2030, including estimations of funding and resources

The development of long-term plans for each of the DAIs allowed the CPM Focus Group to sequence the various activities and ensure that the IPPC Secretariat and other bodies would not become overwhelmed over the course of the Strategic Framework. The monitoring and review process for the overarching implementation plan was developed in parallel.

Sequencing the Development Agenda Items

Implementation of some DAIs commenced while the Strategic Framework was being drafted. Others commenced as soon as CPM endorsed the draft Strategic Framework in 2019. This urgency to deliver provides evidence of the value contracting parties see in the new DAIs. However, pressure on IPPC Secretariat and NPPO resources, both time and funding, mean that it is difficult to work on all the DAIs simultaneously. Sequencing is therefore needed.

Five phases are used to describe the work to implement the DAIs.

Not Started:	Work has not yet commenced. Initial resources need to be allocated prior to moving into the Scope and Plan phase.
Scope and Plan:	Work is underway to understand the opportunity, needs, and scope of work required and to establish a plan that will deliver an effective programme of work. A focus group or steering group supported by the IPPC Secretariat usually leads this phase. At the end of the planning stage, CPM or Bureau approval is typically granted before delivery starts.
Deliver:	The approved plan is being implemented, milestones are being achieved, and benefits are being delivered. The work is delivered using project management disciplines. It is not yet a core or 'business as usual' part of the Secretariat work programme.
Review:	In this phase, the major change components of the planned work have been completed. A review is recommended to see whether the DAI can move from project-based work to a more 'business as usual' approach to delivery, whether further project-based work is required, or whether the DAI should be paused or stopped. In all cases, a CPM decision will be required.
Ongoing core activity:	The work required by the DAI has become 'business as usual' for the Secretariat. Contracting parties are carrying out implementation efforts in their own countries and are being supported by Secretariat advice and resources developed during earlier stages. The Secretariat monitors and reports on delivery of the work and benefits.

It should be noted that these phases reference work at the level of the CPM and not work that may be done by contracting parties to implement the DAI within their countries. For example, implementing *DAI 4: Developing guidance on the use of third-party entities* may enter the delivery phase in 2027 for the work programme of the CPM, while some individual contracting parties may have already implemented the use of third-parties consistent with ISPM 45 and other contracting parties may not wish to consider the use of third-parties in their countries.

Five of the DAIs are already in Delivery phase and should continue. However, it has been possible to provide recommendations for the timeframe of the other three DAIs and the phasing of all DAIs out to 2030. These are illustrated in Figure 1.

Note that for some projects after delivering what is already planned, and having conducted a review of the work, CPM may consider entering a new Scope & Plan phase to consider whether more activity would add additional value. CPM would then decide whether to conduct more delivery activities. The detailed plans for each DAI are discussed in the section 'Plan Summaries for SFDAIs'. For further detail on the funding and resources for each DAI, see Appendix A.

Agenda Item	2023	2024	2025	2026	2027	2028	2029	2030
1. Harmonization of electronic data exchange	Delivery		Review	Ongoing core activity				
2. Commodity-specific ISPMs	Delivery					Review	Ongoing core activity	
3. Management of e-commerce and postal and courier pathways	Delivery	Complete & Review	Scope & Plan	CPM Go or Stop decision				
4. Developing guidance on the use of third-party entities	Delivery		Scope & Plan	CPM Go or Stop decision	Delivery			Review
5. Strengthening pest outbreak alert and response systems	Scope & Plan	CPM Go or Stop decision	Delivery				Review	Ongoing core activity
6. Assessment & management of climate change on plant health	Delivery		Complete & Review	Scope & Plan	CPM Go or Stop decision			
7. Global phytosanitary research coordination	Not Started		Scope & Plan	CPM Go or Stop decision				
8. Diagnostic laboratory networking	Not Started	Scope & Plan	CPM Go or Stop decision	Delivery				

Figure 1. Proposed Sequencing of development agenda items and approximate programme phasing.

Financial and Resource Plan

Budgets have been developed for each DAI. They have been built bottom-up by estimating the resources required to deliver the milestones. Budgets include secretariat resources, contract costs, publication costs etc. Budgets do not include provision for the time and direct costs incurred by contracting parties as they engage in the CPM work programme to deliver these DAIs. The budgets also do not include country-specific capacity building projects organised by contracting parties to implement DAIs in their own countries.

The Secretariat staff costs identified are additional to existing staff costs, except where specified. Proposed budgets for additional Secretariat staff use current standardized FAO costings. It is recognised some people deployed to the work may be lower cost contractors or in-kind staff provided by contracting parties. This would reduce the overall cost of delivery. However, at this stage we are unable to predict for each component of the work whether it will be performed by a permanent member of staff, a contractor, or an 'in-kind' person provided from an NPPO.

In addition to Secretariat resource for each DAI, the CPM Focus Group recommends the Secretariat engage a Programme Manager. The core purpose of this role is to coordinate delivery across the breadth of the DAI implementation activity. The role would ensure:

- appropriate forward planning and budgeting,
- coordinated resource mobilisation for the programme,
- periodic reviews of progress,
- maintenance of risk and issues registers and other programme management disciplines,
- coordinated reporting of progress to the Secretary, Bureau and CPM,
- increased application of programme and project management disciplines across the work,
- timely communication of the positive impacts resulting from implementation.

The communication demands for the DAI work programme are substantial. DAI implementation groups will be expected to work closely with IPPC Secretariat communications experts. This may have implications for resourcing of communications expertise within the Secretariat.

For some DAIs, funding from sources other than the regular programme budget have been identified in the early stages of the work. Typically, this funding or in-kind staff have already been committed to the programme. Beyond this, the CPM Focus Group has not attempted to determine which budget components should be funded from regular programme verses trust funds or other sources (an exception is for harmonisation of electronic data exchange where it is assumed no funding is coming from the regular programme). Some flexibility exists around where regular programme resources are allocated. The Secretariat with the CPM Bureau Finance Committee is best placed to undertake analysis of the budgets developed and propose to CPM how regular programme funds are allocated. The remainder of the budget will need to be provided from other sources including contributions to the multi-donor trust fund (MDTF) from contracting parties, external donors, donor project funding, or an increase in FAO regular programme funding to the IPPC.

Although not agreed by CPM, a request was made during CPM-16 (2022) for the CPM Focus Group to develop two funding scenarios, one optimal and the other minimal. Only one scenario has been developed. It is simply the best estimate of the logical steps required to implement each DAI at a pace

we think the CPM could support. For most DAIs, the proposed steps represent the minimum requirements for successful implementation. The level of resources required to support implementation could be examined further, but this would best be done by the CPM Bureau Finance Committee, working with the Secretariat. The CPM Focus Group is mindful that unless the DAIs are properly resourced, the Secretariat will be put under increased pressure, core programmes could suffer, implementation at the IPPC level will be poor, and contracting parties will find it more difficult to implement in their countries.

Note that milestone and budget estimates for DAIs that are less advanced, e.g., not started, are less detailed and likely to be less accurate than for projects in advanced stages of delivery. The budget estimates are indicative only and need to be firmed up as part of the biennial and annual planning and budgeting processes prior to seeking CPM approval of the annual financial plan.

Total cost of the DAI programme is approximately \$17.9 million over eight years (2023 – 2030; see Figure 2). Almost half the cost is for the ePhyto Solution for which a sustainable funding mechanism is being developed. Excluding the ePhyto solution, the annual cost of the programme ranges from \$0.85 – 1.13 million per annum. As noted previously this cost could reduce if in-kind resources are provided by contracting parties.

If CPM chooses to proceed with implementation at the pace proposed, additional resources will need to be mobilized. Resource mobilization planning for each DAI should be part of the Scope & Plan phase. Projects should not proceed to Delivery phase until sufficient resources have been secured to support delivery. As strategic priorities, the DAIs need to be properly resourced. The Secretariat should not be asked to commence work for which there is not adequate resourcing. As noted above, the new Programme Manager may be able to assist with coordinating resource mobilization efforts in advance of a CPM approval to proceed with a programme of work.

Regional Plant Protection Organisations can play an important role in supporting and coordinating NPPOs to implement the Convention and associated standards, recommendations, guidance and programmes. In November 2022, the Technical Consultation among RPPOs analysed the work of the CPM Focus Group in relation to the inputs and roles of the RPPOs for the implementation of the IPPC Strategic Framework 2020-2030. The RPPOs concluded they can contribute to the implementation of each one of the eight DAIs. However, the way and the extent to which RPPOs can contribute depends on their mandate, background, needs of the region, resources and experience, which differ between RPPOs, and will differ for each one of the DAIs. The RPPOs also decided that at each Technical Consultation among RPPOs meeting, the strategic topics of the IPPC will be discussed and experiences with their implementation activities will be shared to support collaboration among RPPOs.

Budget Summary	2023 (\$'000)	2024 (\$'000)	2025 (\$'000)	2026 (\$'000)	2027 (\$'000)	2028 (\$'000)	2029 (\$'000)	2030 (\$'000)	Total (\$'000)
1 Harmonisation of electronic data exchange	971	1,147	1,163	1,263	1,263	1,263	1,263	1,263	9,596
2 Commodity and pathway specific ISPMs	254	254	324	254	324	309	239	239	2,197
3 Management of e-commerce and postal and courier pathways	112	122	-	-	-	-	-	-	234
4 Developing guidance on the use of third party entities	-	-	50	81	91	121	111	151	605
5 Strengthening pest outbreak alert and response systems	265	425	425	425	425	425	425	425	3,240
6 Assessment and Management of climate change on plant health	161	161	161	-	-	-	-	-	483
7 Global phytosanitary research coordination	-	-	47	95	-	-	-	-	142
8 Diagnostic laboratory networking	54	54	125	165	285	245	265	285	1,478
Total	1,817	2,163	2,295	2,283	2,388	2,363	2,303	2,363	17,975
Total excl. Electronic Exchange	846	1,016	1,132	1,020	1,125	1,100	1,040	1,100	8,379

Figure 2: Summary of proposed implementation budget.

Plan Summaries for Development Agenda Items

Harmonization of electronic data exchange

Benefit statement: As described in the Strategic Framework, a global system for production and exchange of electronic phytosanitary certificate information will be fully operational and integrated at a country level into trade single windows; the system will be supported by a sustainable business model and will be self-funded; and a significant global effort to implement it in all countries will have been completed. As a result of this effort, we will see that the system has strengthened and simplified safe trade in plants and plant products, reduced transaction costs, expedited the clearance of compliant products and eliminated the exchange of fraudulent certificates.

Documented evidence provided thus far includes the avoidance of demurrage charges (one example of such a charge is \$36,000 for one grain shipment) and lower costs now that express shipment of certificates is no longer needed (average cost per shipment of \$55). The Global Alliance for Trade Facilitation has reported that one country has saved \$30 million per year since the adoption of ePhyto.

Status: CPM-10 (2014) confirmed support for developing an ePhyto solution. Since then, the ePhyto Solution has been built, 44 countries have deployed the GeNS system and 112 countries have ePhyto Hub connections, with 70 countries actively exchanging certificate information through the Hub. Over 2.5 million live exchanges have been made since going live in 2017 with a steep increase in usage since early 2020. The functionality of the ePhyto solution continues to grow. Substantial effort is still required within countries to implement electronic exchange.

Delivery: This DAI is coordinated by the ePhyto Steering Group, which is comprised of representatives from the seven FAO regions. The ePhyto Steering Group has mapped the ePhyto system (including the digital harmonization of the phytosanitary certificate), contributes technical input for enhancements and has been the lead for training contracting parties as they come onboard.

The United Nations International Computing Centre (UNICC) provides technical expertise for the ePhyto Solution. UNICC was responsible for building the system and continues to provide maintenance and technical enhancements to the ePhyto Solution based on input from the ePhyto Steering Group and IPPC Secretariat ePhyto Team.

Funding to get ePhyto up and running came from the STDF, and operating costs are now covered through generous donations from several contracting parties. RPPOs are supporting workshops in regions and several in country capacity development projects are funded through the World Bank and the Global Alliance for Trade Facilitation. The Global Alliance has been a key partner in assisting the IPPC Secretariat in the implementation of the ePhyto Solution in developing and less-developed countries. The Alliance is unique in that it brings together a coalition consisting of both government and private sector to introduce, implement and train in the use of the ePhyto Solution.

Long-term plan: A governance body along with a sustainable long-term funding solution will be established to support the continuation of the ePhyto solution.

Several improvements to the ePhyto system will be made, including:

- Translation of the GENS into FAO languages

- Additional functionality in GeNS such as an e-payment mechanism, inspection schedule and location, and traceback of commodities
- Enhancement of the dashboard
- Possible integration of other certification processes into the ePhyto Hub

Online training of ePhyto will be provided in several languages and will include a series of joint industry/IPPC informational webinars. A two-yearly conference may also be held to raise awareness and bring users together to share successes, challenges, and discuss future improvements for the ePhyto solution.

To demonstrate the value of the ePhyto solution, a cost-benefit analysis is being performed by the FAO Investment Centre, with support from the IPPC Secretariat.

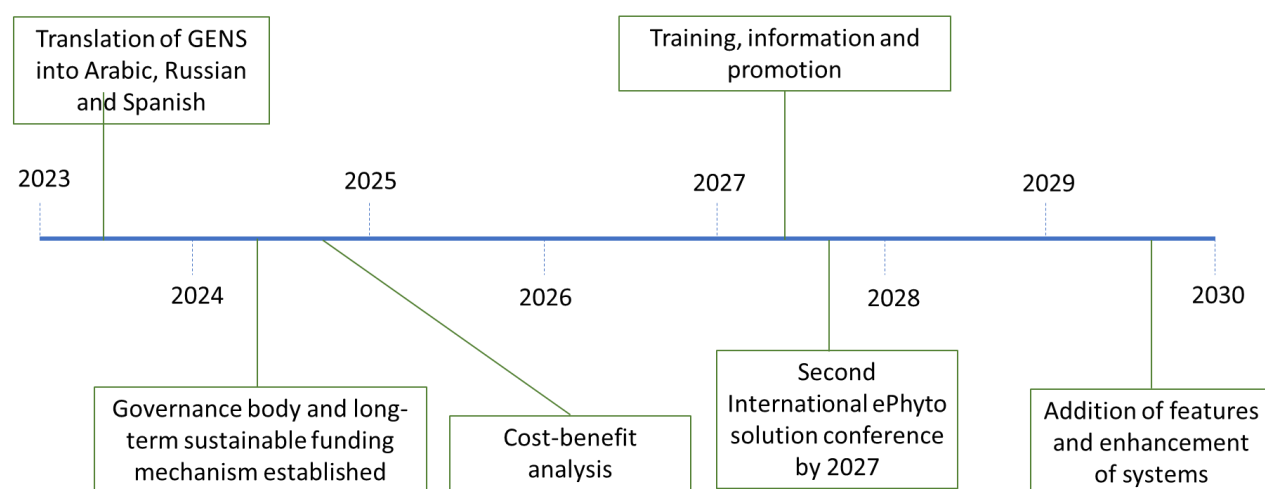


Figure 3. Timeline of activities for the harmonisation of electronic data exchange development agenda item¹.

Finance and resource plan: To carry out the activities of the work programme, the following funding will be required:

2023 (\$'000)	2024 (\$'000)	2025 (\$'000)	2026 (\$'000)	2027 (\$'000)	2028 (\$'000)	2029 (\$'000)	2030 (\$'000)	Total (\$'000)
\$971	\$1,147	\$1,163	\$1,263	\$1,263	\$1,263	\$1,263	\$1,263	\$9796

The core resources responsible for implementation are IPPC Secretariat staff and members of the ePhyto Steering Group. Some RPPO's are also assisting as they hold workshops and other activities to facilitate uptake within their regions. A significant step forward for resourcing will occur when CPM agrees a sustainable long-term funding solution.

Sequencing recommendation: The CPM Focus Group recommends that this should continue in Delivery phase until sustainable funding arrangements are in place, then transition to Ongoing core activity. As

¹ Additional detail on milestones and budget for all DAIs can be found in the appendices to this document.

the work transitions, a review should be conducted and CPM should consider future governance arrangements, change control and approval processes, and standardized regular reporting.

Issues and risks: There are several challenges for getting countries to use ePhyto, including political will, lack of resources and that some countries may still prefer bilateral arrangements.

Commodity-specific ISPMs

Benefit statement: As described in the Strategic Framework, new ISPMs will be adopted and implemented for specific commodities and pathways, with accompanying diagnostic protocols and phytosanitary treatments to support implementation. They will provide NPPOs with harmonized phytosanitary measures, which they may use to support their pest risk management activities and import regulatory systems, or to establish export-oriented production systems. Commodity-specific standards with option for harmonized phytosanitary measures will facilitate market access, simplify and accelerate trade negotiations, open new market access opportunities, and simplify safe trade in plant products.

Status: ISPM 46 'Commodity-specific standards for phytosanitary measures' has been developed and adopted. This is an overarching concept standard and provides guidance on the purpose, use, content, publication, and review of commodity-specific standards. New commodity-specific standards will form annexes under the overarching concept standard. The Technical Panel for Commodity Standards (TPCS) has been established to develop the annexes. There is one topic in the TPCS work programme - International movement of mango (*Mangifera indica*).

Delivery: Following inclusion in the list of standard topics, the commodity-specific annexes will be developed either directly by the TPCS or by expert drafting groups established by the Standards Committee (SC). The TPCS will also be responsible for reviewing commodity-specific annexes, recommending revisions and topics, and developing guidance (with the IC) on aspects related to the annexes.

Long-term plan: The TPCS will begin to develop the first commodity-specific annex on mango fruit, along with accompanying diagnostic protocols and phytosanitary treatments as appropriate. The aim will be to adopt this annex by 2025. While this annex is being developed, other commodities proposed for an annex will be prioritised, with new annexes adopted by 2027 and beyond.

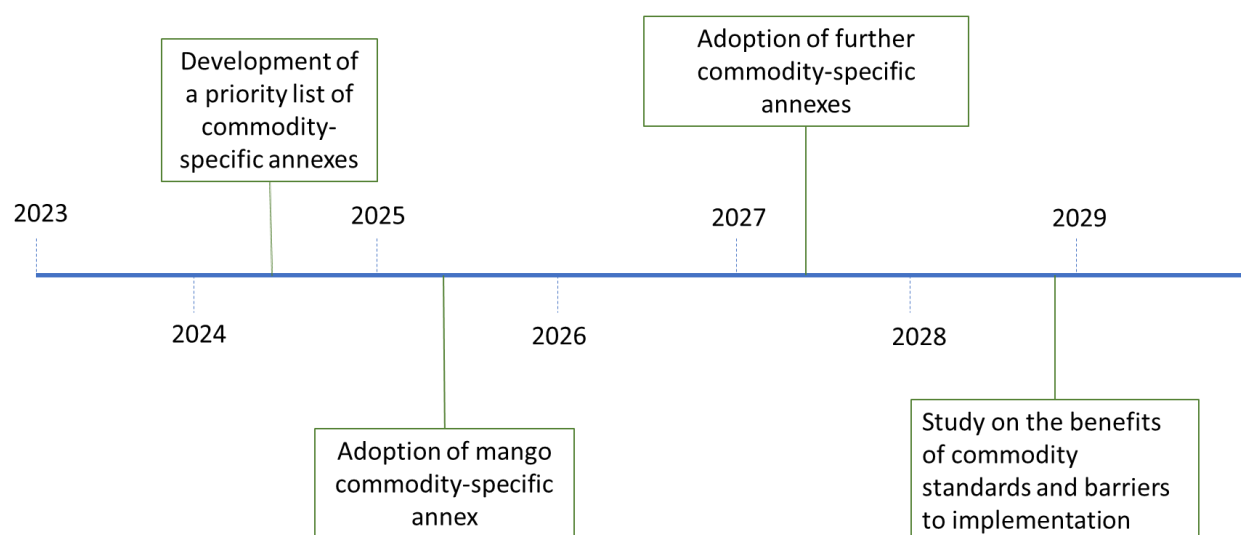


Figure 4. Timeline of activities for the commodity specific ISPMs development agenda item.

To encourage implementation of the commodity-specific annexes communication and advocacy material will be developed for NPPOs. Assessments of the barriers NPPOs face to implement commodity annexes will be carried out, as well as an assessment of the economic, food security, trade and environmental benefits of implementing the commodity-specific annexes. The results of the assessments will identify where additional implementation support is needed.

Finance and resource plan: To carry out the activities of the work programme, the following funding will be required:

2023 (\$'000)	2024 (\$'000)	2025 (\$'000)	2026 (\$'000)	2027 (\$'000)	2028 (\$'000)	2029 (\$'000)	2030 (\$'000)	Total (\$'000)
254	254	324	254	324	309	239	239	2,197

This recognises that developing commodity annexes and operating the TPCS is additional to maintaining the current concept standards and therefore additional secretariat support is required. Funding for external assessments is also reflected in the costs. Resources will include IPPC Secretariat staff and members of the TPCS, SC, SC-7, diagnostic panels, treatment panels, and the IC.

Sequencing recommendation: The CPM Focus Group recommends that this should continue in Delivery phase until at least two ISPM 46 annexes have been adopted by CPM. This will enable lessons to be learnt and the standard setting process to be adjusted, if necessary, to support prioritization of commodity-specific topics and development of commodity-specific annexes to ISPM 46. During transition to Ongoing core activity, a study to evaluate the benefits from implementation of commodity-specific annexes is scheduled.

Issues and risks: There is not an existing system for the prioritisation of commodity-specific annexes, but this can be addressed by the TPCS in the coming year prior to the next call for topics.

Future risks include not receiving sufficient topics for commodity-specific annexes, a lack of funding to develop standards and support implementation, and difficulties quantifying the cost-effectiveness of the commodity-specific annexes.

Management of e-commerce and postal and courier pathways

Benefit statement: Effective management of e-commerce and postal and courier pathways will result in the following key outcomes:

- NPPOs will be aware of the phytosanitary risks posed by business-to-consumer (B2C) and person-to-person (P2P) e-commerce transactions.
- Contracting parties will update their legislation and authorities to address e-commerce challenges, considering digital innovations, available technologies and new business models.
- NPPOs will comply with ISPM 20 (specifically section 4.1). Lists of regulated articles will be prepared and maintained, and will be available to all relevant e-commerce stakeholders, including other government departments and stakeholders in other countries.
- NPPOs will establish public awareness raising, communication, education, and outreach programmes to make consumers, the public and other stakeholders aware of the regulatory requirements, risks and responsibilities associated with cross-border e-commerce.
- Contracting parties will apply risk management measures to identify and intercept e-commerce consignments that present a phytosanitary risk, while facilitating legitimate e-commerce trade (e.g., advanced electronic data, screening methods and non-intrusive inspection methods).
- NPPOs will share information, cooperate, and collaborate with other national border agencies and national postal operators to address pest risks associated with e-commerce trade (e.g., Memorandum of Understanding between NPPOs and their national customs administration).
- NPPOs will gather data and monitor non-compliances, inspections and regulatory activities and will be able to demonstrate a measurable reduction in non-compliances associated with the mail and courier pathways.

Status: This is an important but relatively small DAI work programme that commenced following the adoption of CPM *Recommendation on Internet trade (e-commerce) in plants and other regulated articles*. This DAI includes a joint work programme with the World Customs Organisation (WCO), the Universal Postal Union (UPU) and International Seed Federation (ISF) to manage phytosanitary risks associated with e-commerce and the associated postal and courier pathways. Technical resources are made available on the International Phytosanitary Portal (IPP) and a new e-commerce guide has been published. An informal network of e-commerce experts from contracting parties facilitates information exchange and solutions to e-commerce challenges.

Delivery: The DAI is led by the Implementation and Facilitation Unit within the IPPC Secretariat and is being delivered by the IC Team on e-commerce, which is composed of four members (IC lead, IC RPPO representative, SC representative and the IPPC Secretariat lead on e-commerce). The IC provides oversight of this work with input from the SC.

Long-term plan: The e-commerce guide will be supported by general awareness raising materials targeting NPPOs and national stakeholders in the e-commerce supply chain. More specific awareness raising materials will be developed in collaboration with the WCO, UPU, ISF, Global Express Association, and other industry groups, targeting their members. A webinar and/or workshop will also be given to promote the work on e-commerce.

Following this work, an IPPC Observatory study to characterize the phytosanitary risks associated with e-commerce trade and assess how these risks have changed since 2012 will be launched in 2023. This study will also describe the extent to which NPPOs and RPPOs have implemented the *CPM Recommendation on Internet trade (e-commerce) in plants and other regulated articles*, and it will establish a baseline for measuring key e-commerce outcomes. It is expected that the study will provide recommendations that may lead to a longer-term plan.

When the study results are available, CPM will be asked to decide whether to scope and plan a second phase of work in this area.

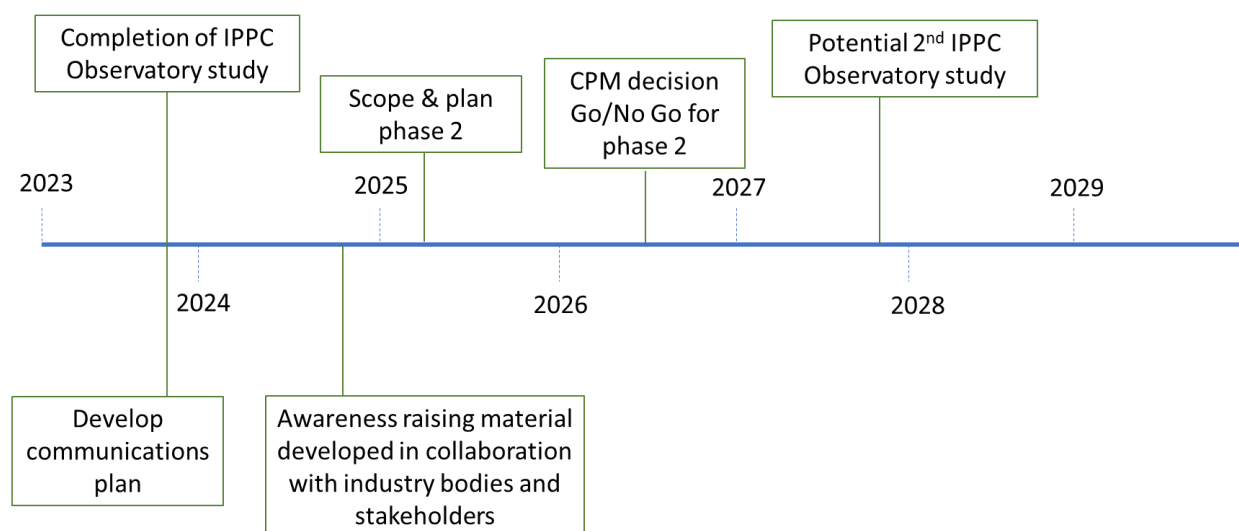


Figure 5. Timeline of activities for the e-commerce development agenda item.

Finance and resource plan: To carry out the activities of the work programme, the following funding will be required:

2023 (\$'000)	2024 (\$'000)	2025 (\$'000)	2026 (\$'000)	2027 (\$'000)	2028 (\$'000)	2029 (\$'000)	2030 (\$'000)	Total (\$'000)
112	122							234

Resources will be provided by in-kind staff contribution from Canada until at least April 2023. Half a staff member has been included in the budget for the 2023-2024 period. If CPM approves scoping and planning for phase two, they should also consider if a Focus Group is required to assist with this work. No budget provision has been made for a potential phase two because of high uncertainty that CPM will decide to fund a potential phase 2. However, if phase 2 were to go ahead with a similar size of work programme, CPM could anticipate costs of approximately \$120,000 per annum.

Sequencing recommendation: The CPM Focus Group recommends this should continue in Delivery phase until 2024 at which time an IPPC Observatory-type study should have been completed. CPM will then be able to decide whether to scope and plan a second phase for the work.

Issues and risks: A significant issue is that e-commerce is very dynamic; the number of cross-border shipments continue to grow, new players continue to engage in e-commerce as both consumers and vendors, and digital technologies and business models are constantly changing. The number of phytosanitary experts working on the leading edge of e-commerce globally is not growing at the same pace and the expertise may be concentrated in a few regions. Any future calls for resources, experts, and case studies may therefore receive a poor response.

Participation in the informal e-commerce network is poor. At this point, the network is used as a mechanism for communicating information from the IPPC Secretariat to key industry stakeholders (e.g., announcements, calls, relevant news items). However, the webinar and/or workshop could be used to encourage more active engagement and launch a more dynamic forum for discussions.

A risk is that some regions are underrepresented in this work. Organizing a webinar and/or workshop on e-commerce will help to raise the visibility of this topic and hopefully encourage broader engagement.

Developing guidance on the use of third-party entities

Benefit statement: As described in the Strategic Framework, countries wanting to use third parties will have access to harmonized resources to support them with implementing the necessary management processes and controls. Standards will give guidance on the use of third-party entities to perform various phytosanitary actions, such as treatments, inspections and pest diagnosis. Standards and guidance will ensure that, when governments choose to take this option, the actions continue to be carried out to the same standard and level of phytosanitary security.

Awareness of the option to use third-party entities will be raised among NPPOs and stakeholders and reports of using third-party entities in NPPO phytosanitary regimes will be shared, increasing the confidence in authorization programmes.

Status: A new standard, ISPM 45 'Requirements for national plant protection organizations if authorizing entities to perform phytosanitary actions', was adopted by CPM in 2021. A webinar has been held to raise NPPO awareness of the ISPM and the concept of authorizing third parties. Scoping and planning for an implementation work programme has not yet occurred but a draft Specification for guidance material was consulted in 2022. The view of the IC is that the development of guidance could be considered for inclusion in the 2024 work programme subject to funding.

Delivery: If CPM decided to proceed with the work, implementation could be delivered by an IC team on third-party entities or an expert working group to develop a guide on the use of third-party entities.

Long-term plan: The long-term plan is subject to development and CPM approval. The CPM Focus Group anticipates guidance would be developed by an IPPC expert working group to aid the implementation of the standard. This guidance would be accompanied by training, communications, and advocacy materials. To ensure the concerns of some NPPOs are addressed, work should also be carried out to better understand and explore these concerns.

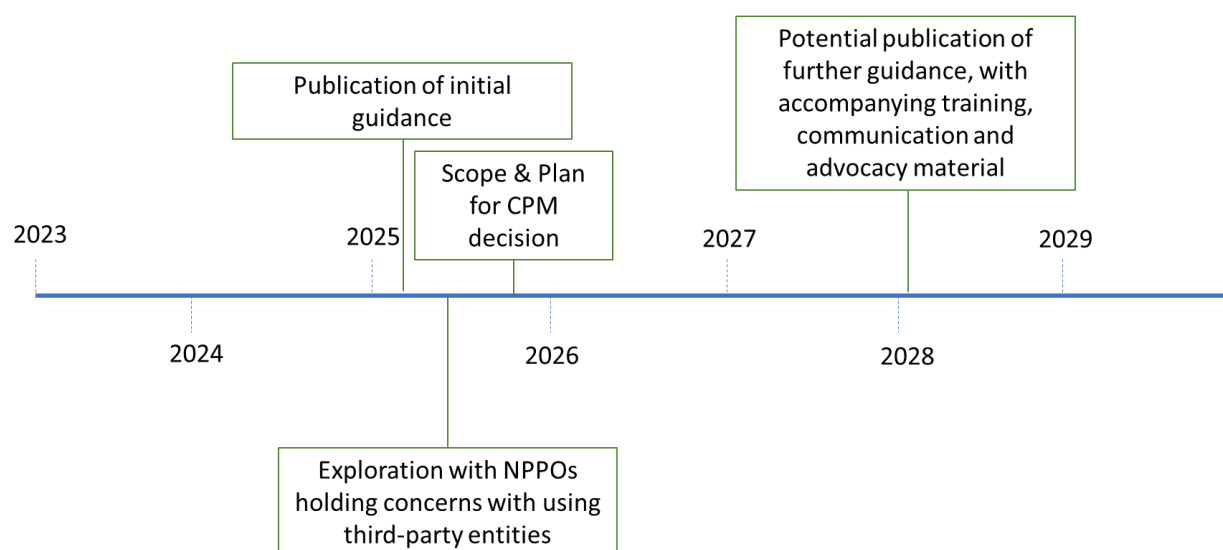


Figure 6. Timeline of activities for the third-party entity development agenda item.

Finance and resource plan: The CPM Focus Group has anticipated CPM will approve a plan for implementation in 2026 and has included resources in the plan. To carry out the activities of the work programme, the following funding may be required:

2023 (\$'000)	2024 (\$'000)	2025 (\$'000)	2026 (\$'000)	2027 (\$'000)	2028 (\$'000)	2029 (\$'000)	2030 (\$'000)	Total (\$'000)
		50	81	91	121	111	151	605

Resources will include IPPC Secretariat staff (0.5 of a staff member), members of the IC, and the expert working group to develop a guide and other associated activities.

Sequencing recommendation: The CPM Focus Group recommends work on developing guidance should be completed by the IC in 2024. Following the development of the guidance, the CPM Focus Group proposes that scoping and planning a more comprehensive implementation programme should commence in 2025, with a CPM decision to proceed with implementing the plan or not in 2026. The scoping should include engaging with NPPOs that raised concerns.

Issues and risks: A lack of information exists on the cost-effectiveness of authorizing third-party entities and there is limited scope for NPPOs who have not previously adopted an authorization programme to test the programme beforehand.

The acceptance of an NPPO to adopt an authorization programme may depend on the level of delegation allowed (e.g., could authorized entities authorize other entities) and whether suitable mechanisms are in place to manage conflicts of interest.

Strengthening pest outbreak alert and response systems (POARS)

Benefit statement: As described in the Strategic Framework, a global pest alert system with mechanisms to evaluate and communicate emerging pest risks will be developed, providing regular

information to NPPOs on changes in pest status around the world. NPPOs will use this to quickly adapt their phytosanitary systems to reduce the risk of introduction and spread. In the case of outbreaks, strengthened pest outbreak response systems and tools will help countries take much more timely action, especially against new incursions. NPPOs, RPPOs and the FAO will collaborate to develop and roll out a comprehensive but easy to use toolbox to help countries respond quickly and effectively. Some RPPOs may play an active role in assisting NPPOs to coordinate outbreak responses across their regions.

Status: A substantial amount of work has been done to Scope and Plan this DAI. In 2022, CPM 16 considered a draft action plan and agreed to establish a POARS Steering Group to further develop the plan to implement this DAI. Because a plan has not yet been approved, this DAI is considered to still be in the Scope and Plan phase. However, it is noted that in parallel with planning, the IPPC Secretariat, supported by technical working groups, has been coordinating strong emerging pest response programmes for fall armyworm (*Spodoptera frugiperda*) and Fusarium banana wilt TR4.

Delivery: The DAI will be led by the POARS steering group and will be delivered by the Implementation and Facilitation Unit within the IPPC Secretariat. The steering group will first redefine the focus of the work and establish the POARS capability, before operationalising the POARS. The steering group will initially be established for two years, at which point it will review and provide recommendations to CPM on its future.

Long-term plan: Following the establishment of the POARS steering group and the development of a workplan, work will begin across three main areas:

1. Evaluating and ranking emerging plant pests. To inform the evaluation and ranking of emerging plant pests, the definition of “emerging pest” will be considered by the Technical Panel of the Glossary.
2. Developing surveillance and response tools. This will first involve the collation of existing tools, before developing tools for the gaps that have been identified.
3. Developing national pest reporting. This will include the development of a website on the IPP to provide access to reporting, the design of a horizon scanning system for collecting information on emerging pests, and establishing a system of communicating alerts on these pests.

When carrying out the work on POARS, it will be important for the steering group and the Secretariat to build an operational network of organisations and stakeholders at global, regional and national levels, and to mutualise activities with the Emergency Animal Health Unit of the FAO.

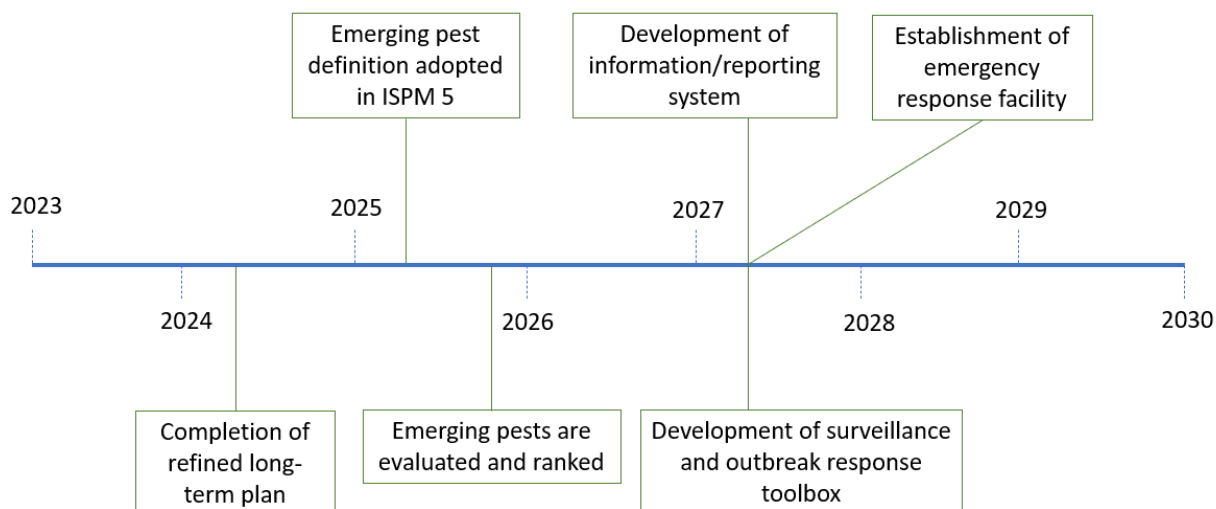


Figure 7. Timeline of activities for the strengthening pest outbreak alert and response system development agenda item.

Finance and resource plan: To carry out the activities of the work programme, the following funding has been tentatively allocated:

2023 (\$'000)	2024 (\$'000)	2025 (\$'000)	2026 (\$'000)	2027 (\$'000)	2028 (\$'000)	2029 (\$'000)	2030 (\$'000)	Total (\$'000)
265	425	425	425	425	425	425	425	3,240

This budget assumes funding at the level indicated in paper CPM 2022/36, paragraphs 54-55 (\$325k staff, \$100k contracts). The staffing as reflected in CPM 2022/36 includes one part-time manager, one dedicated IT developer, one part time administrative person, and one scientific officer. Other resources include IPPC Secretariat staff and members of the IC and the POARS Steering Group.

Sequencing recommendation: The CPM Focus Group anticipates CPM consideration and approval of a revised POARS plan at CPM-18 (2024), at which point this DAI should immediately enter Delivery phase. This is expected to be a large and complex programme in an area where IPPC has not ventured until recently. Establishing well-functioning and repeatable mechanisms to deliver an effective POARS system is expected to take up to four years. With experience of the programme, CPM will be able to determine the right size and structure for the programme. When satisfied the programme is functioning well, there should be a review before a decision to transition to Ongoing core activity. Considerations during transition will need to include suitable governance or steering arrangements, whether sustainable funding for the programme is in place, and how well the programme is complementing other bodies involved in pest outbreak alert and response.

Issues and risks: There is a risk that the workplan developed by the POARS steering group is not accepted by the CPM. The steering group should carefully review feedback at CPM-16 and thoroughly test new proposals with SPG.

There is an ongoing concern that NPPOs will not share data on pest findings in a timely manner. As with other DAIs, there is also a concern over having sufficient funding to take forward the work. The steering group will be looking to address these concerns over 2023 and 2024.

Assessment and management of climate change impacts on plant health

Benefit statement: The key outcomes include, but are not limited to:

- Raising awareness of the impacts of climate change on plant health
- Enhancing the evaluation and management of risks of climate change to plant health
- Enhancing the recognition of phytosanitary matters in the international climate change debate

Status: CPM-15 (2021) established the Focus Group on Climate Change and Phytosanitary Issues (FG-CCPI). The FG worked rapidly to propose a four-year programme of work with a suite of actions prioritized for the first two years. This DAI is now in Delivery phase.

Delivery: At CPM-16 in 2022, the 2022-2025 action plan for the implementation of the DAI was adopted. The action plan will be led by the FG-CCPI and will be delivered by the Integration and Support team within the IPPC Secretariat. Coordination and alignment of this work with that of the other relevant international organizations, as well as collaboration with other relevant public and private sector institutions and organizations will also be critical.

Long-term plan: To raise awareness of the impacts of climate change on plant health, the following activities will be undertaken:

- Convening and participating in meetings and side events related to the impact of climate change on plant health. This will include holding global and regional webinars and giving presentations at the International Plant Health Conference and UN Climate Change Conference Forums.
- Raising awareness through cultural and social media (e.g., radio talk shows, social media, poster and flyers, digital platforms, etc.), developing a climate change webpage on the International Plant Portal as a repository of information, and engaging with stakeholders through surveys and by other means to gather information on the topic.
- Facilitate discussions within IPPC subsidiary bodies, regional workshops as well as other IPPC technical groups and CPM. This will include the IC, SC and Bureau; the fall armyworm and *Fusarium* tropical race 4 meetings; the communications focus group meetings; RPPO meetings and conferences; and side events of CPM.
- Assist NPPOs to meet their national reporting obligations (NRO) established by IPPC. The national reporting system could be enhanced to further share information on changes to pest distributions, host range, and adaptability of pests and host plants.

To enhance the evaluation and management of climate change risks to plant health, the following will be carried out:

- Supporting countries to collect, analyse and use climate change impact-related information in decision-making.

- Reviewing existing use of climate change assessments in pest risk analysis and surveillance, providing advice on climate change models, providing advice on assessment and tools, and developing guidance on incorporating climate change assessments in pest risk analysis, surveillance and risk management.
- Creating Regional climate hubs e.g., USDA Climate Hubs that provide science-based information to agricultural and natural resource managers to help address the effects of climate change.
- Incorporating 'climate change impacts on plant health' criteria (similar to the 'potential implementation issues' criteria) into the template for draft 'standard' specifications, draft guidance material specifications, and into the assessment criteria for the upcoming IPPC Call for topics.
- Reviewing linkages to the safe provision of food aid
- Supporting countries in building capacity on the impacts of climate change on plant health
 - Developing, reviewing and promoting tools to enhance the preparedness and response of Agricultural Extension Agents, farmers and other relevant stakeholders on the impacts of climate change on plant health
 - Incorporating climate change references and technical resources into IPPC guidance materials
 - Developing an IPPC guide to assist in identifying cultural and social impacts of climate change on plant health, including island communities under threat of sea level rise

To enhance the recognition of phytosanitary matters in the international climate change debate, the following will be carried out:

- Strengthening collaboration with relevant organisations, such as the Intergovernmental Panel on Climate Change (IPCC) and the Secretariat of the Convention of Biological Diversity.
- Facilitating, promoting and supporting phytosanitary issues-related policy dialogue at the global level through mainstreaming phytosanitary policies into the climate change debate

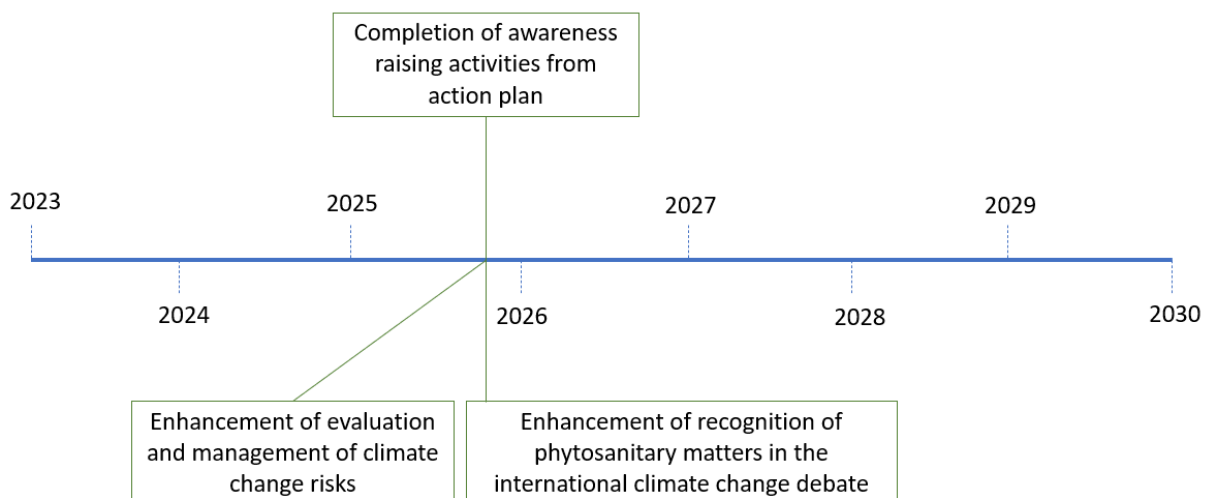


Figure 8. Timeline of activities for the assessment and management of climate change impacts on plant health development agenda item.

Finance and resource plan: To carry out the activities of the work programme, the following funding will be required:

2023 (\$'000)	2024 (\$'000)	2025 (\$'000)	2026 (\$'000)	2027 (\$'000)	2028 (\$'000)	2029 (\$'000)	2030 (\$'000)	Total (\$'000)
161	161	161						483

Resources will include IPPC Secretariat staff and members of the FG-CCPI. NPPOs will be essential to achieving positive outcomes as they implement the tools and recommendations developed by the CPM Focus Group. No budget provision has been made for a potential phase two because of high uncertainty that CPM will decide to fund a potential phase 2. However, if phase 2 were to go ahead with a similar size of work programme, CPM could anticipate costs of approximately \$160,000 per annum.

Sequencing Recommendations: The CPM Focus Group recommends this should continue in Delivery phase. The CPM Focus Group anticipates once the 2022-2025 action plan has been delivered, CPM may want to build off the work done. At that point, there should be a review of whether further project-based work should be established, with recommendations presented to CPM.

Issues and risks: Funding and resources to support the development of guidance materials, webpages, communication resources, workshop initiatives and other activities need to be mobilised to deliver the action plan in its entirety.

Global phytosanitary research coordination

Benefit statement: Improved international coordination of plant health research will help countries avoid overlap in research activities, advance plant health research more quickly, and utilize research resources in the most efficient and effective manner.

Status: No work has been started on this DAI.

Delivery: To understand the benefits of developing a global phytosanitary research coordination structure, a study should be carried out to explore current international and regional phytosanitary research structures. EUPHRESOCO, which is predominantly focused within the EPPO region, is one of these structures and is particularly pertinent, as it is considering further expansion outside the EPPO region. A CPM Focus Group could be established to understand EUPHRESOCO's intentions, analyze and discuss the results of the study, identify any gaps, and determine whether a global coordination structure will provide value. Similar research coordination organizations at a global or regional level should also be examined.

Long-term plan: When a better understanding of opportunities presented by current research coordination mechanisms is developed, the CPM Focus Group will need to determine if there is a gap needing to be filled or an improved mechanism to be established. At that point scoping and planning could start so CPM can be presented with a plan and decide to proceed or to stop. If there is agreement to continue, the focus group will be extended, and an implementation plan will be developed to fill coordination gaps or build on existing networks.

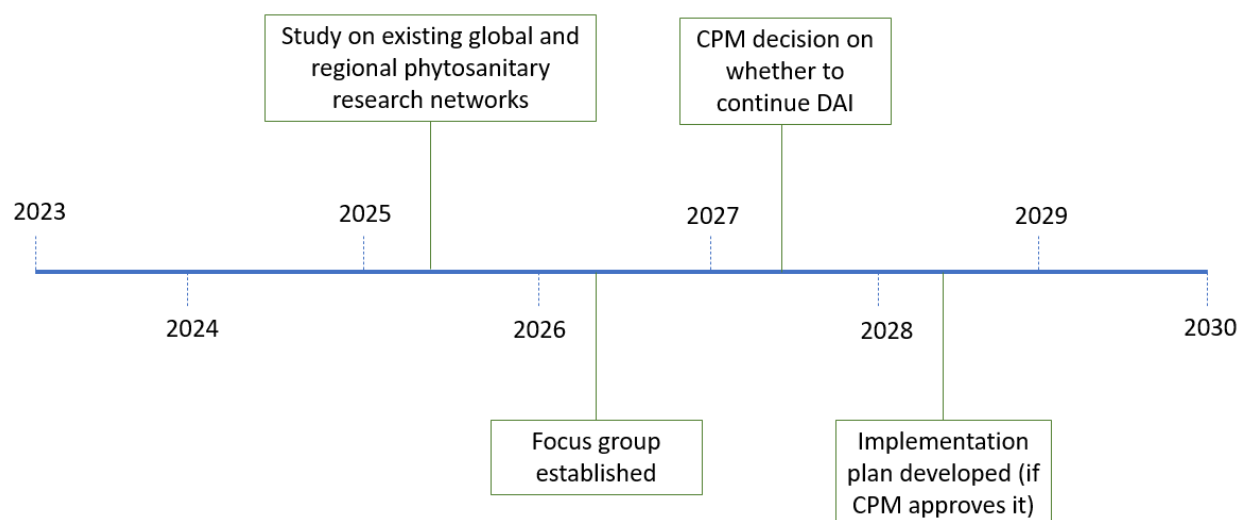


Figure 9. Timeline of activities for the global phytosanitary research coordination development agenda item.

Finance and resource plan: To carry out the activities of the work programme, the following funding will be required:

2023 (\$'000)	2024 (\$'000)	2025 (\$'000)	2026 (\$'000)	2027 (\$'000)	2028 (\$'000)	2029 (\$'000)	2030 (\$'000)	Total (\$'000)
		47	95					142

Resources will include IPPC Secretariat staff and a focus group yet to be established to assess the value of this DAI. Some RPPOs may be able to assist in identifying regional mechanisms and helping the new CPM Focus Group to understand and analyze them. No budget provision has been made after 2026 because of high uncertainty that CPM will decide to proceed with the work due to the unknown

outcomes of the EUPHRESKO study. However, if the work does proceed, CPM could anticipate costs of approximately \$230,000 per annum.

Sequencing Recommendations: The CPM Focus Group recommends not starting this development agenda item until 2025 at the earliest. During the Scope and Plan phase, a study should be conducted to build an understanding of the coordination mechanisms that already exist and what gaps the IPPC could fill (or whether existing mechanisms are sufficient). The continuation of the DAI will be subject to a CPM decision.

Issues and risks: It may be challenging to implement a coordination system with current international and regional structures and policies. There is also a risk of duplication and that upon implementation, participation in a new global phytosanitary research coordination structure will be low and there will be a lack of funding and research topics.

Diagnostic laboratory networking

Benefit statement: The capacity of NPPOs to detect and identify pests will be improved through the development of a lab network that provides reliable and timely diagnoses. It is expected that NPPOs will have almost instant access to reliable plant pest laboratories or plant health clinics, with a broad range of analytical capacities. This will allow NPPOs to establish technically justified phytosanitary measures, facilitate safe trade, and respond to pest outbreaks more quickly.

National laboratories with strong diagnostic functions will offer reliable services within regions or globally, through the lab network, reducing the need for all countries to develop duplicated capacity.

IPPC Regional laboratory networks can serve as surveillance sites to monitor “hot spots” for pest spread, which will support activities against emerging pests.

Status: To date, a small amount of work has been commissioned to examine the current state of diagnostic capability in NPPOs and to confirm whether there is a need for a diagnostic laboratory network. No other scoping or planning has been done other than by this CPM Focus Group in order to make an approximate budget provision.

Delivery: This DAI should be led by a new CPM Focus Group and later by a permanent steering group (if agreed), with support from the IPPC Secretariat.

Long-term plan: Following the study commissioned to examine the current state of diagnostic capability in NPPOs and investigate the need for a global network or regional networks, a focus group will be established to discuss the scope and functionality of the lab network and the role of the IPPC in it. The recommendations made by the focus group will be discussed by the Bureau, SPG and other relevant bodies, before being presented to the CPM for decision.

If the CPM decides that a lab network is of value, a steering group will be established to direct implementation of the DAI. This group will develop an implementation plan in discussion with the Bureau, SPG and other relevant bodies. It is envisaged that an international workshop could be held to share experiences and gather the views from the IPPC, OIE and Codex communities.

Subject to CPM approval of the implementation plan, a pilot programme will then be initiated with a small number of NPPOs to test the lab network concept before being rolled out to more NPPOs. If successful a register of accredited NPPO or RPPO laboratories could be established to deliver the network. A sustainable funding mechanism may be necessary depending on how it is structured. The development of additional ISPMs may be required to support a harmonized approach.

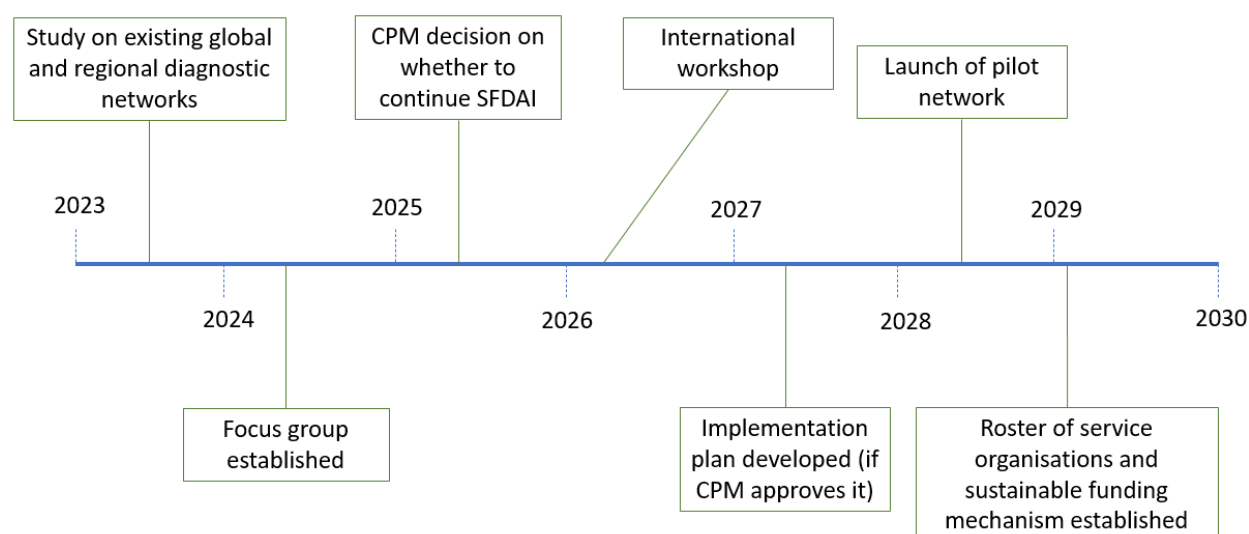


Figure 10. Timeline of activities for the diagnostic laboratory networking development agenda item.

Finance and resource plan: To carry out the activities of the work programme, the following funding will be required:

2023 (\$'000)	2024 (\$'000)	2025 (\$'000)	2026 (\$'000)	2027 (\$'000)	2028 (\$'000)	2029 (\$'000)	2030 (\$'000)	Total (\$'000)
54	54	125	165	285	245	265	285	1,478

Resources will include IPPC Secretariat staff and a focus group yet to be established. Some RPPOs may be able to assist in analyzing needs and assessing existing regional networks, e.g. one RPPO is trying to establish a diagnostic network for diseases in their region.

Sequencing recommendations: This DAI has the potential to be a very large and complex programme. The CPM Focus Group recommends the Scope and Plan phase should commence soon (2024) with the establishment of a focus group to work with the IPPC Secretariat. We expect this to take two years before a viable proposal with enough detail is presented to CPM for approval. As with some other large DAIs, the CPM may need more than one year to make a final decision on how to proceed.

Issues and risks: There is a risk that the participation in the network will be low and there will be insufficient expertise to maintain it.

There may not be sufficient NPPO laboratories willing to be accredited to provide regional or global services in specialist areas.

There are a number of issues that will need to be resolved before the network is established, including liability of diagnosis results, a mechanism for official recognition, confidentiality, service fees, and the

methods for sending samples internationally. Some of these issues may require new ISPMs to be developed.

Monitoring and Review

Governance

Ownership of the overarching implementation plan for the Strategic Framework DAIs rests with the Commission of Phytosanitary Measures (CPM).

As the CPM's executive body, between CPM meetings, the CPM Bureau will provide oversight and strategic direction for the overarching implementation plan.

Each DAI will have its own implementation group as follows:

1. **Harmonization of electronic data exchange** – the ePhyto Steering Group, which provides guidance and advice on IPPC efforts to facilitate the international exchange of electronic phytosanitary information among contracting parties.
2. **Commodity- and pathway-specific ISPMs** – the TPCS, which develops and updates commodity standards within the framework of the concept standard and develops guidance on related aspects.
3. **Management of e-commerce and postal and courier pathways** – the IC team on e-commerce, which helps to guide the work on e-commerce.
4. **Developing guidance on the use of third-party entities** – the IC team on developing guidance on the use of third-party entities.
5. **Strengthening pest outbreak alert and response systems** – the POARS Steering Group, which will provide coordination, guidance and advice on IPPC actions to develop and implement a Global Pest Outbreak Alert and Response System, avoiding duplication and building synergies with other systems.
6. **Assessment and management of climate change impacts on plant health** – the FG-CCPI, which will coordinate the development and support the implementation of the IPPC's action plan on climate change to 1) raise awareness of the impacts of climate change on plant health; 2) enhance evaluation and management of risks of climate change to plant health and 3) enhance the adequate recognition of phytosanitary matters in the international climate change debate.
7. **Global phytosanitary research coordination** – a CPM Focus Group on Global Phytosanitary Research Coordination (yet to be decided by CPM).
8. **Diagnostic laboratory networking** – a CPM Focus Group on Diagnostic Laboratory Networking (yet to be decided by CPM).

Each of these groups will be led by a member of a contracting party and will be supported by the IPPC Secretariat. The groups will be responsible for developing monitoring and review plans for their respective DAIs. The IPPC Secretariat will be responsible for coordinating development of monitoring and review plans and reporting results to CPM.

Review

To ensure the overarching implementation plan is progressing well and remains fit for purpose, the plan will be reviewed on a regular basis. These reviews should include plan refreshes prior to the start of each FAO biennium and a more substantial review half-way through the Strategic Framework period. Reviews may also be carried out at any point as deemed necessary.

The plan refreshes should be carried out for each DAI by the respective implementation group. These refreshes will allow the progress of the DAIs to be tracked and will provide the opportunity to develop more detailed short- and medium-term plans for subsequent years. By holding these refreshes prior to each FAO biennia, it will allow for any changes in funding and resources to be considered prior to the finalisation of the budget. The FAO biennia for the period of the implementation plan are 2022-23, 24-25, 26-27, 28-29 and 30-31. Any significant changes to funding and resources identified by an implementation group should be raised with the CPM Bureau as appropriate.

The more substantive review carried out half-way through the Strategic Framework period will be initiated by the CPM Bureau in 2025. In addition to assessing the progress of the DAIs, this review will consider all DAIs together and will identify where further sequencing of activities is required and whether there are other areas of interest that should be included as DAIs. The results of the review should be tested with the SPG and agreed by the CPM in 2026.

In general, while plan refreshes will be carried out by implementation groups and the more substantial halfway review will be carried out by the CPM Bureau, small independent groups or focus groups may be set up to review the DAIs or certain aspects of the DAIs, as necessary. The programme manager, if appointed, would also be monitoring the progress of the DAIs on a more continuous basis.

Monitoring and review plans

For reviews to be carried out as described in the previous section, monitoring and review plans should be developed for each DAI and for the overarching implementation plan as a whole.

Monitoring and review plans for each DAI should be developed by the respective implementation group. These plans should be developed as soon as possible after the start of the DAI work programme or, if the work programme has already started, as soon as possible following CPM approval of this overarching implementation plan.

Progress of the DAIs should be monitored against Key Performance Indicators (KPIs), which will be focussed on milestones and deliverables. The following milestones and deliverables should be considered as essential KPIs for the DAIs:

1. Harmonization of electronic data exchange

- a. Translation of GENS into Arabic, Spanish and Russian by December 2023
- b. Approval of sustainable funding mechanism by December 2024
- c. Second international ePhyto solution conference by 2027
- d. 112 countries exchanging in production by 2030

2. Commodity- and pathway-specific ISPMs

- a. Prioritisation of commodity-specific annexes by April 2024
- b. Adoption of first ISPM commodity-specific annex by April 2025
- c. Adoption of further commodity-specific annexes by April 2027
- d. Study to evaluate the economic, trade and food security benefits from implementation of commodity standards and the barriers to implementation initiated by April 2028

3. Management of e-commerce and postal and courier pathways

- a. Completion of communications plan for e-commerce by December 2023
- b. Completion of IPPC Observatory study on e-commerce (phase 1) by December 2023
- c. Awareness raising material developed in collaboration with industry bodies and stakeholders by 2024
- d. Possible long-term planning based on recommendations from the IPPC Observatory study by December 2024
- e. Possible completion of IPPC Observatory study on e-commerce (phase 2) by December 2027

4. Developing guidance on the use of third-party entities

- a. Publication of initial guidance by 2025
- b. Investigation of NPPO concerns started by 2025
- c. Potential development of additional guidance, training, communication and advocacy materials by April 2026
- d. Increase in confidence in the use of third-party entities by 2027

5. Strengthening pest outbreak alert and response systems

- a. Establishment of POARS steering group and operational working groups by April 2023
- b. Establishment of POARS information system and toolbox by April 2027
- c. Establishment of POARS emergency response facility by April 2027

6. Assessment and management of climate change impacts on plant health

- a. Implementation of climate change action plan by December 2025
- b. Review next steps for CPM proposal by April 2026

7. Global phytosanitary research coordination

- a. Investigation of existing networks by December 2025
- b. Develop proposal for research coordination by April 2027
- c. Subject to CPM decision, develop implementation plan for global phytosanitary research coordination by December 2027

8. Diagnostic laboratory networking

- a. Investigation of existing networks by June 2023
- b. Establishment of CPM Focus Group and development of proposal by April 2025
- c. Development of implementation plan by April 2027

- d. Subject to CPM decision, development of roster of service organisations/experts, administrative arrangements, and template MOUs by December 2029
- e. Piloting of a first diagnostic laboratory network by December 2028
- f. Launch the initial networks by December 2030

Implementation groups may identify additional milestones and KPI as they develop more detailed plans. These milestones and deliverables should be monitored regularly by the implementation groups and could be supported by the maintenance of progress reports, with Red-Amber-Green ratings, and risk registers. Where possible, the current benchmark level of performance for a KPI (or the level prior to the project starting) should be established to help demonstrate impact.

Reports on progress against milestones and deliverables should be completed at least every 12 months using the template in Appendix B. Following the completion of a DAI or transition to business-as-usual arrangements, a final report should be written, detailing the outcomes and lessons learned from the work. All reports should be provided to the CPM Bureau.

In addition to monitoring and review plans for each DAI, a monitoring and review plan should also be developed for the overarching implementation plan, covering all DAIs together. This plan will ideally be developed by the programme manager with CPM Bureau receiving regular reports to allow decision making on sequencing and re-allocation of funding and resources within CPM approved financial plans. Reports from the individual DAIs will form the basis of the overarching monitoring and review plan.

Investment Prospectus

The overarching implementation plan should be accompanied by an investment prospectus. This will have two purposes. The first is to raise awareness of the overarching implementation plan to contracting parties, RPPOs and other relevant international bodies, and the second is to be used as information material for donor organisations, including funding decision-makers in contracting parties, to attract funding for the DAIs.

The investment prospectus should be developed by the Secretariat in close collaboration with the CPM Bureau and the CPM Focus Group on Communications.

Conclusions

At the request of CPM, the Focus Group has developed an overarching implementation plan for the IPPC strategic framework 2020-2030. The eight DAIs have been sequenced to smooth the demands on IPPC and contracting party resources. Five of the eight DAIs are already well underway and the Focus Group considers there would be little to be gained by outing any of them on hold. For the remaining three DAIs, start dates have been proposed that balance the need to manage resource demand and the desire to start work as soon as possible.

The integrated overarching plan enables the IPPC CPM and Secretariat to maintain a strong focus on delivering the IPPC Strategic Framework and specifically the DAIs. Each of the DAIs were designed to deliver tangible benefits to contracting parties. Each will support NPPOs to deliver phytosanitary protection to their country.

For each DAI, activity and milestone plans have been developed with budgets for the funding and staff required to support the work. Both the plans and the budgets need to be revisited and updated on a regular basis. Updated multi-year plans should be presented to CPM on a regular basis. All budgets are estimates and are not proposed for approval until they are included in annual financial plans.

The Focus group considers that implementation of the plan will benefit from the appointment of a programme manager. The programme manager can ensure integration is maintained through close cooperation across DAIs. They can also schedule regular review of plans and monitor and report progress against plans. A significant increase in funding is required to implement the programme as planned and the programme manager could also assist in mobilising additional funds from donor countries and organisations.

Following CPM approval, the Bureau will work with the IPPC Secretariat to implement the plan.

APPENDIX A – Detailed Activities and Funding for Development Agenda Items

Harmonization of electronic data exchange

1 Harmonisation of electronic data exchange	2023	2024	2025	2026	2027	2028	2029	2030	Total	
Activity Description	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)	Explanatory Comments
UNICC Hub Operation	\$ 177	\$ 180	\$ 182	\$ 182	\$ 182	\$ 182	\$ 182	\$ 182	\$ 1,448	0
UNICC GeNS Operation	\$ 267	\$ 329	\$ 333	\$ 333	\$ 333	\$ 333	\$ 333	\$ 333	\$ 2,592	0
IPPC Secretariat Staff	\$ 200	\$ 210	\$ 320	\$ 320	\$ 320	\$ 320	\$ 320	\$ 320	\$ 2,330	salary equivalent to P3 as lead plus 0.5 support at P2
Translation of GeNS into Arabic	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Enhancements to Hub and GeNS	\$ 96	\$ 98	\$ 99	\$ 99	\$ 99	\$ 99	\$ 99	\$ 99	\$ 786	0
NPPO Onboarding Support: 10 countries at \$20,000 per country	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 1,600	0
International ePhyto Solution Conference & Training (one every 2 years)	\$ -	\$ 100	\$ -	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 600	0
Webinars, Online Seminars, Promotion and Marketing	\$ 30	\$ 30	\$ 30	\$ 30	\$ 30	\$ 30	\$ 30	\$ 30	\$ 240	0
Total	\$ 971	\$ 1,147	\$ 1,163	\$ 1,263	\$ 1,263	\$ 1,263	\$ 1,263	\$ 1,263	\$ 9,596	

Commodity and pathway specific ISPMs

2 Commodity and pathway specific ISPMs	2023	2024	2025	2026	2027	2028	2029	2030	Total	
Activity Description	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)	Explanatory Comments
0	\$ 799	\$ 848	\$ 1,263	\$ 1,263	\$ 1,263	\$ 1,263	\$ 1,263	\$ 1,263	\$ 9,226	0
Over-arching commodity standard is adopted by CPM-16	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Standard setting process (SSP) applied. Additional Secretariat	\$ 205	\$ 205	\$ 205	\$ 205	\$ 205	\$ 205	\$ 205	\$ 205	\$ 1,640	\$205k is okay
Selection of the Technical Panel on Commodity Standards (TPCS) by the	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Meetings of the TPCS	\$ 34	\$ 34	\$ 34	\$ 34	\$ 34	\$ 34	\$ 34	\$ 34	\$ 272	0
Webinar on IPPC commodity standards	\$ 15	\$ 15	\$ 15	\$ 15	\$ -	\$ -	\$ -	\$ -	\$ 60	Cost include interpretation in to all FAO languages
Communications and advocacy material developed	\$ -	\$ -	\$ -	\$ -	\$ 10	\$ -	\$ -	\$ -	\$ 10	0
First specific commodity standard is adopted: mango fruit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Phytosanitary treatments adopted	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Diagnostic protocols adopted	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Study carried out on capacity of NPPOs and critical factors necessary	\$ -	\$ -	\$ -	\$ -	\$ 75	\$ -	\$ -	\$ -	\$ 75	consultant
Standard setting process reviewed and if necessary adjusted to	\$ -	\$ -	\$ 70	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 70	Secretariat staff time, SC. Secondment
Study to evaluate the economic, trade, food security, and	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 70	\$ -	\$ -	\$ 70	consultant
Total	\$ 254	\$ 254	\$ 324	\$ 254	\$ 324	\$ 309	\$ 239	\$ 239	\$ 2,197	

Management of e-commerce and postal courier pathways

3 Management of e-commerce and postal and courier pathways	2023	2024	2025	2026	2027	2028	2029	2030	Total	
Activity Description	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)	Explanatory Comments
Publication of e-Commerce Guide (editing, graphic design, PWS)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	In-kind staff contribution by Canada until April 2023 (25% FTE)
Translation of e-Commerce Guide (Ar, Es, Fr, Ru, Zh)	\$ 14	\$ 14	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 28	MDTF to be used for French translation. Other translations are
e-Commerce webinar/workshop (promotion, platform,	\$ -	\$ 10	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10	In-kind staff contribution by Canada until April 2023 (25% FTE)
Develop a communications plan for e-Commerce	\$ 5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5	In-kind staff contribution by Canada until April 2023 (25% FTE)
Develop general awareness-raising materials targeting NPPOs and	\$ 5	\$ 8	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 13	As per communications plan. This might include a video and a
Develop awareness-raising materials or a tool kit in	\$ 5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5	In-kind staff contribution by Canada until April 2023 (25% FTE)
Develop awareness-raising materials in collaboration with	\$ 8	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8	In-kind staff contribution by Canada until April 2023 (25% FTE)
Develop awareness-raising in collaboration with International	\$ -	\$ 10	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10	In-kind staff contribution by Canada until April 2023 (25% FTE)
IRSS Study on E-commerce (2021-01), Phase 1	\$ 10	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10	A person needs to be hired to design and complete this study
Review and Report	\$ -	\$ 15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Secretariat Resource	\$ 65	\$ 65	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 130	0.5 FTE P2 from 2022 - 2024
Total	\$ 112	\$ 122	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 234	

Developing guidance on the use of third-party entities

4 Developing guidance on the use of third party entities	2023	2024	2025	2026	2027	2028	2029	2030	Total	
Activity Description	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)	Explanatory Comments
ISPM on Authorization is adopted by CPM-15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	Adopted in 2021 (ISPM 45)
Secretariat resource to support NPPO's and RPPO's to understand	\$ -	\$ -	\$ -	\$ 81	\$ 81	\$ 81	\$ 81	\$ 81	\$ 405	Secretariat staff time P3 0.5 FTE from 2026,
Communications and advocacy material developed	\$ -	\$ -	\$ -	\$ -	\$ 10	\$ 10	\$ -	\$ -	\$ 20	Consultant in 2027-2028 to develop training materials
Publication of training materials on authorization of third-party entities	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10	\$ 10	\$ -	\$ 20	0
Support NPPOs in developing domestic legislation/regulation to	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 20	\$ 20	\$ 20	\$ 60	FAO legal support
Study to explore implementation progress, barriers and	\$ -	\$ -	\$ 50	\$ -	\$ -	\$ -	\$ -	\$ 50	\$ 100	0
Total	\$ -	\$ -	\$ 50	\$ 81	\$ 91	\$ 121	\$ 111	\$ 151	\$ 605	

Strengthening pest outbreak alert and response systems

5 Strengthening pest outbreak alert and response systems	2023 (\$'000)	2024 (\$'000)	2025 (\$'000)	2026 (\$'000)	2027 (\$'000)	2028 (\$'000)	2029 (\$'000)	2030 (\$'000)	Total (\$'000)	Explanatory Comments
Activity Description										
Secretariat support staffing based on minimum viable product as set	\$ 165	\$ 325	\$ 325	\$ 325	\$ 325	\$ 325	\$ 325	\$ 325	\$ 2,440	KEEP AT THE LEVEL WE HAVE HERE. \$325k annually, but 2023 budgeted
Procurement of translation services, consultant/experts, travel.	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 800	0
Establish steering group	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Develop and implement transition phase workplan	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Present steering group workplan to the SPG	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Allocation of funds/resources by the Finance Committee to the	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Hire POARS staff/consultant to work with IPPC Secretariat	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Prepare ToRs for operational working groups	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Working group to evaluate/rank emerging pests set up	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Working group to develop surveillance and response tools set	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Working group on national pest reporting set up	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
The Technical Panel of the Glossary (TPG) considers the definition of	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
POARS renamed to indicate the global nature of the system	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Build an operational network of organisations and stakeholders at	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Estimate and assign regular budget funds to have continuous	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Develop POARS resource mobilisation plan	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Mobilise extrabudgetary funds as an alternative or as a complement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Develop POARS communication plan	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Develop POARS monitoring and evaluation plan, which includes an	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Oversight of the system through external audits to evaluate the	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Design and construct POARS portal/website within IPP to	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Define and implement global horizon scanning system for	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Establish system for the communication of alerts on	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Establish process within POARS system to identify needs and	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Collate existing tools (using the Implementation and Capacity	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Development of new tools as required (covering all areas of	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Establish an emergency trust fund and a specific account to support	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Establish a mechanism for a quick transfer of funds to the request of	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Establish a roster of response expertise and resources that NPPOs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Development, adoption and application of processes for rapidly	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Facilitate access to rapid diagnostics	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Mutualise activities with the Emergency Animal Health Unit in	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Total	\$ 265	\$ 425	\$ 425	\$ 425	\$ 425	\$ 425	\$ 425	\$ 425	\$ 3,240	

Assessment and management of climate change impacts on plant health

6 Assessment and Management of climate change on plant health	2023	2024	2025	2026	2027	2028	2029	2030	Total	
Activity Description	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)	Explanatory Comments
Secretariat resource to coordinate programme efforts and support NPPO's and RPPO's to understand and implement including	\$ 161	\$ 161	\$ 161	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 483	1 FTE secretariat resource
Draft an IPPC action plan on "climate change impacts on plant health" with a schedule to be	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Present the IPPC draft action plan on "climate change impacts on plant health" to SPG and Bureau for	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Support the implementation of the action plan at the global, regional and national levels (call major	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Convene global and regional levels webinars (to NPPOs and RPPOs) on the impacts of climate change on	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Developing an IPPC guide to assist NPPOs in identifying, assessing, mitigating and managing 'Climate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Give the presentation titled "Initiatives to Address the Increasing Risk to Plant Health from Plant Pests Due to Climate Change" at the 2021 North American Plant	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Promote the FG-CCPI and its action plan at the 2022 IPPC Plant Health	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Investigate opportunities to raise awareness on the impacts of climate change on plant health at	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Investigate opportunities to raise awareness of the impacts of climate change on plant health, including cultural and social impacts (e.g., radio talk shows, social media,	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Develop a 'climate change impacts on plant health' webpage (landing page) on the IPP as a repository of	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Engage stakeholders at different levels (Online survey and in-person and telephone interactions) to gather information on climate change impacts on plant health	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Include the 'climate change impacts on plant health' topic into the agenda of all upcoming IPPC IC, SC and Bureau meetings to raise	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Include the 'climate change impacts on plant health' topic into the agenda of all upcoming IPPC Fall Armyworm (FAW) and Fusarium Tropical Race 4 (TR4) meetings to	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Include the 'climate change impacts on plant health' topic into the	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Include 'climate change impacts on plant health' topic into the agenda	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Include side session into the CPM	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Explore how the IPPC NRO system, which combines official reporting by contracting parties with other available and published information, may be enhanced to further share information on	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0

Contd...

6 Assessment and Management of climate change on plant health	2023 (\$'000)	2024 (\$'000)	2025 (\$'000)	2026 (\$'000)	2027 (\$'000)	2028 (\$'000)	2029 (\$'000)	2030 (\$'000)	Total (\$'000)	Explanatory Comments
Activity Description										
Review existing NPPO approaches to incorporating climate change considerations in pest risk analysis	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Provide advice on the use of climate change models e.g., pros and cons of different models, time period to use, uncertainties,	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Provide advice on how to assess the impact of climate change on individual pests, the suite of pests on an individual crop and pest	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Provide advice on developing tools or link to tools that will help phytosanitary risk assessments for	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Recommend the use of internet-based identification tools that allow for the rapid identification of plant pests, e.g., USDA APHIS Pest Identification Technology Lab, to help support increased plant pest surveillance and reporting	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Recommend the creation of regional climate hubs, e.g., USDA Climate Hubs that provide science-based information to agricultural and natural resource managers to help address the effects of climate change. These climate hubs could	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Review and recommend the use of predictive models for plant pests that incorporate the effects of climate change to inform strategic planning and improve pest management which supports the increased capacity building	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Provide recommendation on the most appropriate means of incorporating climate change considerations into PRA and surveillance, whether through the development of recommendations,	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Include a 'climate change impacts on plant health' criteria (similar to the 'potential implementation issues' criteria) into the template for draft 'standard' specifications, draft guidance material	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Review linkages and opportunities to support the CPM Recommendation on "Safe provision of food and other humanitarian aid to prevent the	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Develop, review and promote tools to enhance the preparedness and response of Agricultural Extension Agents, farmers and other relevant stakeholders on the impacts of	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Conduct a review and evaluation of all IPPC guidance materials (guides, e-learning, website component pages) to investigate opportunities to incorporate 'climate change	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Develop an IPPC guide to assist in identifying cultural and social impacts of climate change on plant health, including island	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Cooperate and exchange information on climate change and plant health matters with the Intergovernmental Panel on Climate Change (IPCC) and other international and regional	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Liaise with other relevant entities that deal with climate change such as the Secretariat of the Convention	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Mainstream phytosanitary policies into the climate change debate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Total	\$ 161	\$ 161	\$ 161	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 483	0

Global phytosanitary research coordination

7 Global phytosanitary research coordination	2023	2024	2025	2026	2027	2028	2029	2030	Total	
Activity Description	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)	Explanatory Comments
FG Develop, distribute, and analyse establish needs, barriers, opportunities, and scope and function of current research coordination networks and their impact.	\$ -	\$ -	\$ 15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 15	Don't start until 2025
Identify gaps and develop proposal to address	\$ -	\$ -	\$ -	\$ 15	\$ -	\$ -	\$ -	\$ -	\$ 15	0
CPM Decision to proceed or not	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
FG to scope and design new coordination mechanism	\$ -	\$ -	\$ -	\$ 15	\$ -	\$ -	\$ -	\$ -	\$ 15	0
CPM approval and decision to proceed	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
1st annual phytosanitary research congress for researchers	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	dependent on CPM agreement
Secretariat resource to support all processes and FG	\$ -	\$ -	\$ 32	\$ 65	\$ -	\$ -	\$ -	\$ -	\$ 97	0.25 FTE P2 Staff, then up to 0.5 in 2027 if CPM approval to proceed.
Total	\$ -	\$ -	\$ 47	\$ 95	\$ -	\$ -	\$ -	\$ -	\$ 142	

Diagnostic laboratory networking

8 Diagnostic laboratory networking	2023	2024	2025	2026	2027	2028	2029	2030	Total	
Activity Description	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)	Explanatory Comments
Secretariat resources	\$ 39	\$ 39	\$ 95	\$ 95	\$ 195	\$ 195	\$ 195	\$ 195	\$ 1,048	2023 = 0.25 FTE (P4), 2024 = 0.25 FTE (P4), 2025 = 0.5 FTE (P4), 2026 =
Study for basic understanding on diagnostics in NPPOs and need for lab network (survey included)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	Bureau already approved budget(total 40K)
Study result analysis and report (comments collected) with	\$ 15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 15	Bureau already approved budget(total 40K)
Report to CPM and get agreement to establish a Focus Group	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	2024
Establishment of a FG with NPPOs and RPPO to develop proposal for CPM consideration	\$ -	\$ 15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 15	2024
Discussion on role of IPPC, scope and functionality of lab network in the Bureau, subsidiary bodies, SPG, TC-RPPO, and RW etc.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	2024
Agreement in CPM on role of IPPC, scope and functionality of lab network and discussion on future direction of lab network	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	2025
Steering group establishment and meetings	\$ -	\$ -	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 60	2025
Hosting an international workshop	\$ -	\$ -	\$ 20	\$ -	\$ 20	\$ -	\$ 20	\$ -	\$ 60	2026
Development of detailed implementation plan by the steering group and discussion in Bureau, SPG, TC-RPPO, RW and subsidiary bodies etc.	\$ -	\$ -	\$ -	\$ 60	\$ -	\$ -	\$ -	\$ -	\$ 60	2026 \$60k for consultation support and report writing
Agreement on the implementation plan in CPM	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	2027
Development of roster of service organizations/experts, administrative arrangement for service (including funding mechanism)	\$ -	\$ -	\$ -	\$ -	\$ 60	\$ -	\$ -	\$ -	\$ 60	2027
Call for use of networks, small scale workshops to facilitate use of the network	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Pilot network program	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 40	\$ 40	\$ -	\$ 80	0
MOUs among NPPOs, IPPC and Service organizations etc	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
Launching the initial networks and feedback for improvement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 80	\$ 80	0
Diagnosis trainings through IPPC lab network coordination	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	Maybe feasible after 2030
Total	\$ 54	\$ 54	\$ 125	\$ 165	\$ 285	\$ 245	\$ 265	\$ 285	\$ 1,478	

APPENDIX B – DAI reporting template

DAI Reporting template	
DAI	
Implementation group	
Report writer	
Date	
Summary of progress	
Next steps	
Assessment against monitoring and review targets	
Issues and risks	
Support required	

APPENDIX C – CPM Focus Group membership

Table 2. CPM Focus Group membership.

Region/body represented	Name and organization
Africa	Vacant
Asia	Teppei Shigemi Ministry of Agriculture, Forestry and Fisheries (MAFF), Japan
Europe	Matthew Everatt Department for Environment, Food and Rural Affairs (Defra), UK
North America	Katherine Hough United States Department of Agriculture-Animal Plant Health Inspection Service-Plant Protection and Quarantine (USDA-APHIS)
Latin America and Caribbean	Diego Quiroga SENASA, Argentina
South-West Pacific	Glenn Dulla Guam Department of Agriculture, Biosecurity Division
Near East	Vacant
IC	Kyu-Ock Yim Animal and Quarantine Agency, Republic of Korea
CPM Bureau	Peter Thomson Biosecurity New Zealand, Ministry for Primary Industries
SC	André Felipe C. P. da Silva Quarantine Division Ministry of Agriculture, Livestock and Food Supply, Brazil
RPPO	Nico Horn

	Director-General/Directeur Général European and Mediterranean Plant Protection Organization
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