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COMMISSION ON PHYTOSANITARY MEASURES

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Recommendations and report from the CPM Focus Group on Pest Outbreaks Alert and Response Systems
Agenda item 8.8.1
Prepared by the CPM Focus Group on POARS

1. Background

- [1] During CPM-14 (2019), the concept of emerging pests and emergency issues was discussed and several countries expressed their concern regarding the situation with *Spodoptera frugiperda* (Fall armyworm) and strongly supported exploring how the IPPC Community could develop and/or strengthen global Pest Outbreak Alert and Response Systems.
- [2] In addition, during the CPM-14 (2019) session on “Successes and challenges in implementing the IPPC” the RPPO *Organismo Internacional Regional de Sanidad Agropecuaria* (OIRSA¹) shared its well-established emergency alert and response system which had helped to eradicate an incursion of the Central American flying locust (*Schistocerca piceifrons piceifrons*) within 18 hours of its detection. This outcome occurred because of excellent coordination among high level authorities and established procedures for timely communication and actions.
- [3] OIRSA and FAO have organized simulation exercises to help build the capacities of the NPPOs in the region to respond to pest outbreaks. A video of the simulation highlighting all measures taken by Nicaragua against *Fusarium oxysporum* f.sp. *cubense* Tropical Race 4 (TR4) is available on the *Instituto de Protección y Sanidad Agropecuaria* (IPSA) website². The IPPC Secretariat attended this simulation to better understand how the OIRSA system functions.
- [4] CPM-14 (2019) requested that the Bureau draft an action plan for an IPPC pest emergency system to be submitted to CPM-15 (2020) with input from the SPG. The IPPC Secretariat developed the document and the SPG suggested that this initiative should be aligned with the one of the development agenda items listed in the IPPC Strategic Framework (2020-2030) entitled “Strengthening Pest Outbreak Alert and Response System” in which the concepts of “emerging pests” and “emergency situations” are embedded. It was agreed that the scope would be limited to quarantine or potential quarantine pests.
- [5] A draft action plan has been drafted with input from the FAO Locust and Transboundary Pests, the CPM Bureau (June 2019), the SPG (2020), TC-RPPOs (2020-21) the Standards Committee (SC), and the Implementation and Capacity Development Committee (IC) (2020). In particular, the IC agreed that a project supporting this work was aligned with the IPPC Strategic Objectives outlined in the IPPC Strategic Framework (2020-2030), “had strategic value and provides a competitive advantage”.
- [6] Preventing pests is indeed very cost effective. A recent synthesis has shown that invasions of insects alone cost a minimum of US\$76.0 billion per year globally³.

Activities

Calls to gather experiences and resources on the topic

- [7] CPM-14 (2019) had requested that updates on emerging pest situations be added to the CPM agenda as a standing item. A Call for Pest Outbreak Alerts from contracting Parties had been issued in preparation of CPM-15 (2020). As the CPM in April 2020 was cancelled, the responses received were not presented.

¹ *Organismo Internacional Regional de Sanidad Agropecuaria* (OIRSA) website <https://www.oirsa.org/>

² IPSA video on *Fusarium oxysporum* f. sp. *cubense* Tropical Race 4 (TR4) simulation in Nicaragua in August 2019: <https://www.ipsa.gob.ni/NOTICIAS/itemid/157/SIMULACRO-IPSA-ANTE-UN-POSIBLE-BROTE-DE-LA-MARCHITEZ-POR-FUSARIUM>

³ InvaCost, a public database of the economic costs of biological invasions worldwide available at <https://www.nature.com/articles/s41597-020-00586-z>

- [8] A Call for phytosanitary technical resources related to Pest Outbreak Alert and Response Systems was made in 2020 and four technical resources were received for tracking the distribution of pests in response and were posted on the IPP.

Linkages with existing FAO initiatives on pests of concern

- [9] Experiences in dealing with Fall Armyworm (*Spodoptera frugiperda*) have been considered, including how coordination mechanisms and networks can be set at the national, sub-regional, regional and global levels to help ensure appropriate and efficient action is taken. A FAO-IPPC Fall Armyworm Technical Working Group on “Quarantine and Phytosanitary Measures” was established and is managed by the IPPC Secretariat and is part of an overall Fall Armyworm Global Action Plan. Guidelines for the prevention of Fall Armyworm were published and represent one of the components in the toolbox.
- [10] The IPPC Secretariat is also involved in a FAO project aiming to draft a strategy for the whole of Latin America to prevent *Fusarium oxysporum* f. sp. *cubense* Tropical Race 4 (TR4) from spreading. An IC Team was established in September 2021 to help respond quickly to this TR4 outbreak.
- [11] Lessons learnt from these activities are detailed in point 5 of this paper entitled “Considerations related to the information systems and tools available through the POARS”.

Activity of the CPM Focus Group on Pest Outbreak Alert and Response Systems in 2021

- [12] In July 2020, the CPM Bureau, on behalf of the CPM, established a CPM Focus Group on Pest Outbreak Alert and Response Systems (abbreviated to FG in this document) and requested the IPPC Secretariat to issue a call for experts. In December 2020, the CPM Bureau selected 16 experts⁴ including representatives from the CPM Bureau itself, the SC, the IC, experts from each FAO region (with the exception of the Near-East region as no nominations were submitted), an expert from a regional plant protection organization, and experts from several international organizations (Center for Agriculture and Biosciences International (CABI), Food and Agriculture Organization (FAO), World Animal Health Organization (OIE), and International Atomic Energy Agency (IAEA)), as well as from two networks of researchers: Centre de Coopération Internationale en Recherche Agronomique pour le Développement (CIRAD) and International Society for Plant Pathology (ISPP).
- [13] The FG met virtually each month from January to September 2021. In addition, 15 sub-meetings were held to complete the twelve tasks defined in its Terms of Reference². To plan efficiently the delivery, for each of the 12 tasks defined in the Terms of References (ToRs), one of the FG experts volunteered to lead the work on each task, supported by additional FG experts and they met and discussed extensively each task (topic), in correlation with other related tasks. Over 20 side meetings were also organized to advance work on these tasks.
- [14] Presentation sessions were also organized whereby managers of existing pest outbreak alert and response systems presented details of the operation of their system. The following systems were presented: FAO Emergency Prevention System (EMPRES); European and Mediterranean Plant Protection Organization (EPPO) system; European Food Safety Authority (EFSA) system; European Union Notification System for Plant Health Outbreaks (EUROPHYT); French epidemiological platform; FAO use of the Epidemic Intelligence from Open Sources (EIOS) for Animal Health; Organismo Internacional Regional de Sanidad Agropecuaria (OIRSA) system; Centre for Agriculture and Biosciences International (CABI) system; Cropwatch; Pacific Community (SPC) system; Australian system; North America Plant Protection Organization (NAPPO) system, USA National Plant Diagnostic Network; World Organization for Animal

⁴ Membership List Focus Group for Strengthening Pest Outbreak Alert and Response Systems
https://assets.ippc.int/static/media/files/publication/en/2021/02/Focus_Group_for_Strengthening_Pest_Outbreak_Alert_and_Response_Systems_Membership_List_2021-02-16.pdf

Health (OIE) system EIOS; Pest Lens; Argentinian Network of Experts (SINAVIMO) and FAO Emergency Management Center for Animal Health and related tools. A study describing many of these prominent alert and response systems was drafted and will be published in the first quarter of 2022. In addition, the Focus Group⁵ formulated detailed recommendations related to each task.

- [15] All decisions were based on the experience of the experts and knowledge and analysis of existing pest alert and response systems captured in the study described above. All meeting reports have been posted on the IPP3.
- [16] In light of the work done so far by the FG, the considerations presented in this document are made for the development, implementation and maintenance of a Pest Outbreak Alert and Response System. A new name was sought to indicate the global nature of the system. However, the FG had varying ideas so this issue will need to be considered further with the help of a communication expert, understanding that there are many acronyms and that a single word may convey the message better. In the meantime, this system will be abbreviated as “POARS” in this document.
- [17] The FG considers the POARS as a combination of people, organizations, information and tools, coordinated by the IPPC Secretariat. Thus the “system” is more than a software or computer system as it is sometimes implied.
- [18] Consistent and progressive work allowed the formulation of the following considerations which were presented to the Strategic Planning Group in October 2021⁶. The SPG thanked the FG for the outstanding preliminary outcomes and report. Inputs from SPG are integrated into this document.

2. Considerations on definitions

- [19] The FG advises the Standard Committee request the Technical Panel on the Glossary (TPG) to consider the term “emerging pest” and a definition to be included in ISPM 5 (Glossary of Phytosanitary Terms). This term needs to be tailored/aligned with the activities of POARS. The following definition is proposed:

“A pest qualifying as a quarantine pest for which the pest risk or impact for an area has recently increased substantially, due to changes in pest-intrinsic factors, hosts, pathways or environment related factors with potential damage reaching epidemic proportions.”
- [20] The Standards Committee could support this group in harmonizing terminology related to the planning of prevention, preparedness and rapid response activities, in particular the terms contingency plan, emergency plan, prevention plan, preparedness plan, action plan and response plan.

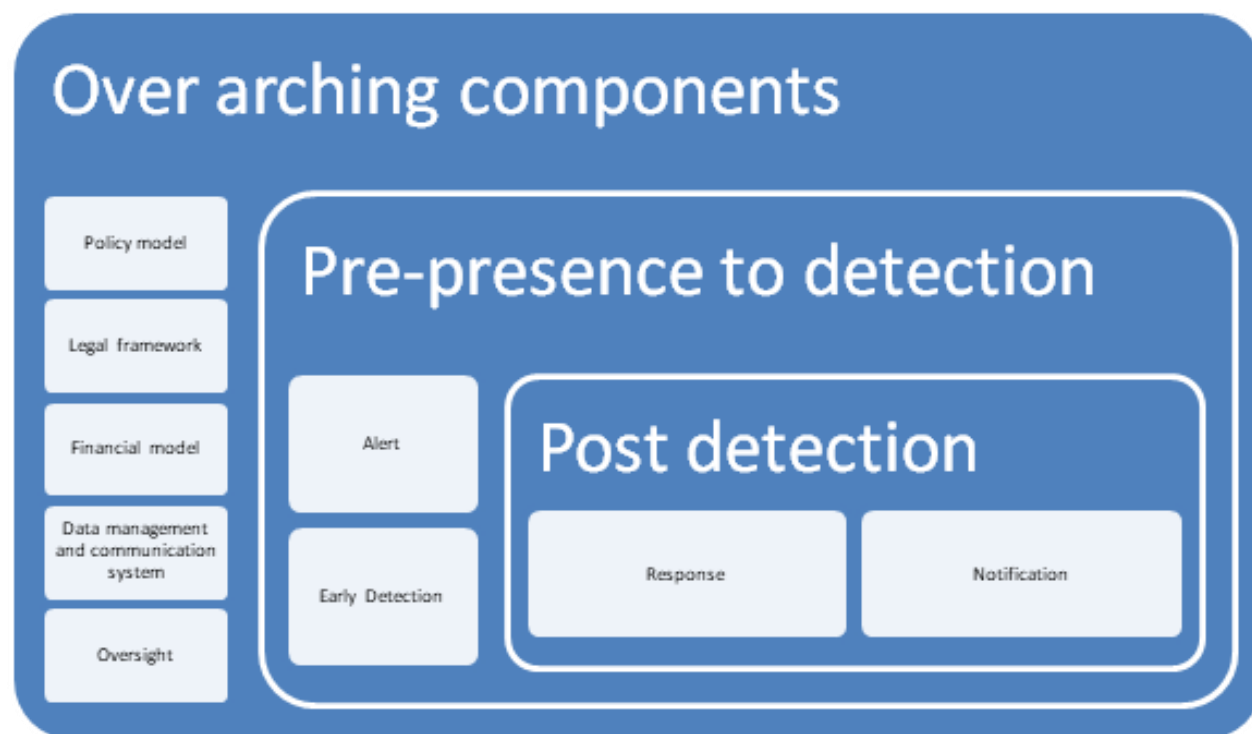
⁵ IPP Publications: <https://www.ippc.int/en/publications/>

⁶ Tenth session of the Strategic Planning Group meeting, October 2021:
https://assets.ippc.int/static/media/files/publication/en/2021/12/FINAL_SPG_Oct_Report_2021-12-07.pdf

3. POARS overarching components

[21] All POARS components were accurately detailed in the full report and are summarized in Figure 1.

Figure 1. Basic components of an alert and response system

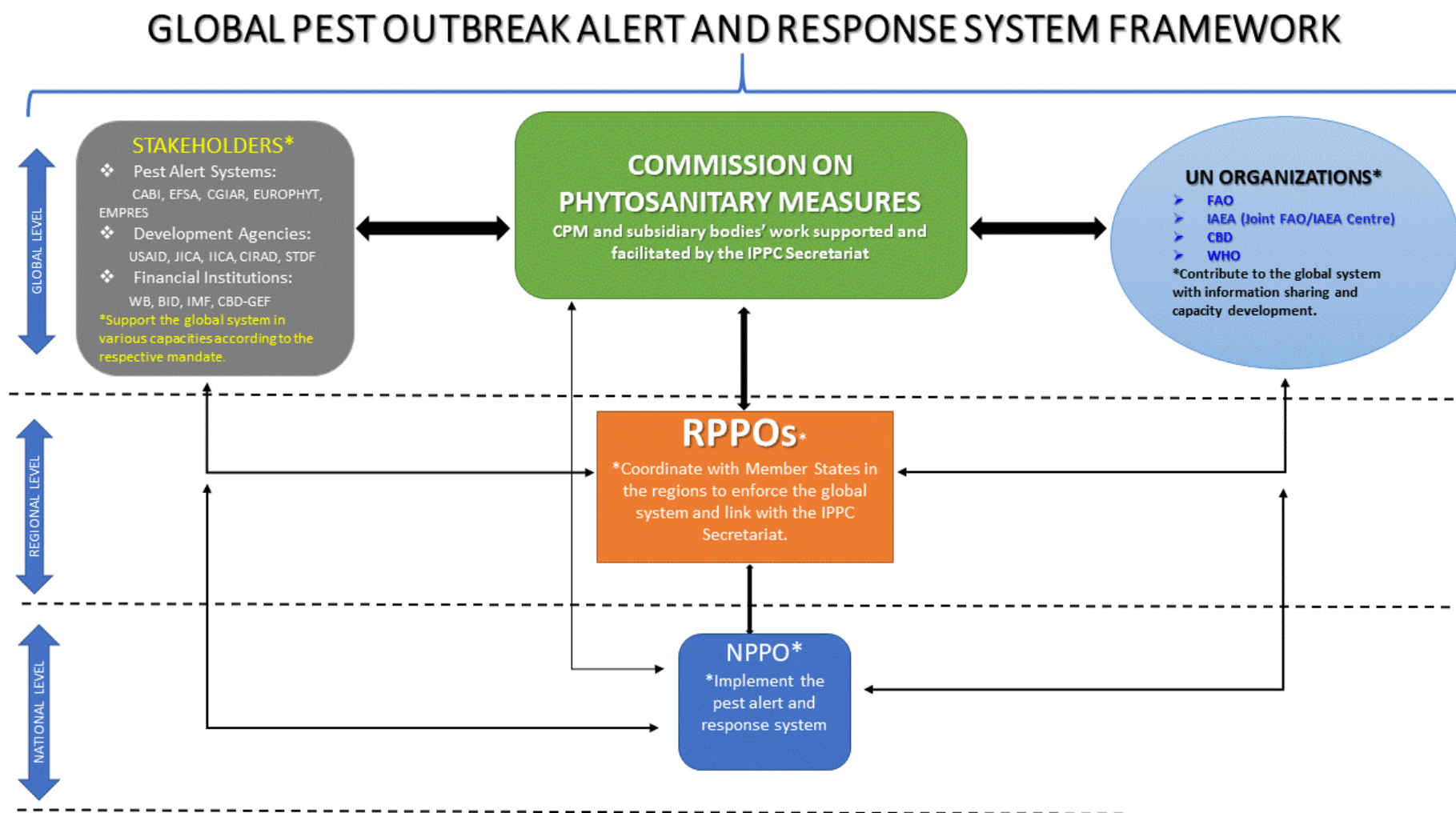


4. Considerations related to relations with other bodies and stakeholders

[22] The POARS must build synergies and avoid duplication with activities conducted by other organizations. The system must facilitate the interconnection and activities of international, regional (see point 6) and national organizations and other stakeholders and will support activities against emerging pests. The system must be closely interconnected at all levels through clear communication channels. The FG considers the establishment of a global system framework (as described in Figure 2) imperative. The framework presents the participating organizations and stakeholders and shows the interconnections. The proposed POARS Committee (see point 6 of this paper) would provide direction and oversight to the POARS.

[23] The importance of RPPOs in assisting NPPOs and coordinating outbreak responses across their regions is emphasized below. As highlighted during the SPG held in October 2021, RPPOs are all different in their settings and capacities, hence their engagement in the POARS will need to be flexible and depend on their will and characteristics. Their role would be determined on a case-by-case basis and could go from simple sharing of information to participation in response activities. NPPOs remain closer to the outbreak and response circumstances and the POARS would provide them with strategic and technical advice and capacity development.

Figure 2. Proposed framework for the Pest Outbreak Alert and Response System (POARS).



[24] As happens in parallel systems related to animal health, stakeholders' meetings should be periodically organized to get information on the situation of individual emerging pests as well as on higher level aims as how the POARS operates. Stakeholders would include FAO offices, donors and international organizations.

5. Considerations related to the information systems and tools available through the POARS

[25] A dedicated open access POARS webpage (on the IPPC website, www.ippc.int) would provide different types of information. An associated free mobile application to provide alerts is also strongly advised.

[26] The following suggestions are made on the information systems and tools:

- A **dedicated webpage** should be set up and connections made between the POARS webpage and RPPO websites. The website and access to information should be user-friendly and available in multiple UN languages.
- **The webpage should provide access to a toolbox. The tools could include:**
 - automated processes to scan media and scientific sources for information on emerging pests and distribute it to affected/interested parties (e.g. the EIOS).
 - Data visualization of the geographic distribution of emerging pests and their progressive spread.
 - Tools for the collection and sharing of surveillance data for emerging pests.
 - Tools available for surveillance and control (defined as suppression, containment or eradication of a pest population) of emerging pests.
- The IPPC Secretariat set up a FAO/IPPC Fall Armyworm Technical Working Group on Quarantine and Phytosanitary Measures as well as an IC Team on *Fusarium oxysporum f. sp. cubense* Tropical Race 4. These activities are further described under point 13 of the agenda. Global technical resources were produced (i.e. Prevention, preparedness and response guidelines for these pests) and virtual workshops were organized on the content of these guidelines. The lessons learned from these activities support the request for the provision of tools and procedures to facilitate access more readily to expertise on diagnostics, surveillance and control (to be considered under the Development agenda "Diagnostic Laboratory Networking"), as well as access to contingency plans and procedure manuals for emerging pests surveillance and control.
- Specific webpages could be created for selected emerging pests (e.g. as per for FAW).
- POARS must include capacity building for NPPOs to improve their ability to detect pests and incentives for NPPOs to report them. Pest reports need to be submitted in a timely and transparent manner and NPPOs need to respond quickly when asked to validate reports.
- The information system must be legally supported (e.g., ensure no liabilities issues for the IPPC Secretariat).

[27] **POARS is intrinsically dependent on pest reports from contracting parties.** The IPPC Secretariat has delivered a National Reporting Obligations (NROs) work plan for the past several years under the guidance of the Implementation and Capacity Development (IC) Committee and IC Team on NROs (see agenda item 11.2). To incentivize these pest reports, the POARS FG exchanged with the IC Team on NROs and made a few suggestions, including:

- Providing capacity development on pest reports (e.g. during IPPC Regional Workshops), also targeting management level and providing case studies of concrete benefits from reporting.
- Providing an incentive to report, such as access to an emergency fund when dealing with a new pest outbreak.

- Building a list of Contracting Parties that have demonstrated excellent NROs records, this will help build trust.
- Privately confronting Contracting Parties with information from other sources, such as Epidemic Intelligence from Open Sources (EIOS) and encourage CPs to officially report on these pests.

6. Considerations related to the governance of the POARS

[28] In addressing its tasks laid out in their Terms of Reference, a key consideration of the FG has been how to operationalize a POARS, and what institutional arrangements would be most appropriate. The questions below were examined.

[29] **Should the POARS be operationalized under the auspices of the CPM or through some other mechanisms?** Similar systems in human and animal health are not always managed by the internationally recognized standard setting body for the sector, but the FG considers that POARS should be established by and under the auspices of the CPM. The aims of the POARS are very closely aligned to the objectives of the Convention. As the CPM is mandated to promote the full implementation of the objectives of the Convention (Article XI), and it was the CPM that called for more attention being given to emerging pests, it is appropriate for CPM to be the responsible body for POARS. This does not preclude CPM from changing this arrangement in the future.

[30] This arrangement also supports the extensive cooperation that will be necessary for the POARS to be successful. The Convention recognizes the role of Regional Plant Protection Organizations (Article IX) and of International Cooperation (Article XIII).

[31] Given the major endeavor envisaged for the POARS, the FG recommends to set-up a POARS operational framework composed of government organizations and other organizations at a global, regional and national levels. A POARS Steering Committee would provide direction and oversight to the global system. The FG has examined and laid out in detail the roles for participating organizations including at the global level with FAO and the IPPC Secretariat as well as RPPOs, NPPOs and other organizations in the governance and operationalization of POARS. The roles are presented in the FG more detailed document entitled “Roles at Global, Regional and National Levels for Strengthening Pest Outbreak Alert and Response Systems” available on the IPP⁷.

[32] What body under CPM should be responsible for POARS? The FG considered whether POARS should be established as part of the IC, or whether a new subsidiary body should be established. The FG ideally recommends that a new subsidiary body is established, provisionally entitled the Pest Outbreak Alert and Response Systems Committee (POARSC). This POARSC should be established to provide general direction to the POARS, ensure overall coordination between stakeholders’ organizations globally and to drive resource mobilization.

[33] There are several reasons for recommending a new subsidiary body:

- The establishment of POARS is envisaged as a major endeavor that will make a significant contribution to the objectives of the Convention. It touches on many aspects of the work of contracting parties, and therefore merits a dedicated subsidiary body.
- From contracting parties’ concerns expressed at recent CPMs, particularly in the light of their experience with several emerging pests such as Fall Armyworm, it is clear that contracting parties want to see improved institutional arrangements and responses for addressing

⁷ IPP publications <https://www.ippc.int/en/publications/>

emerging pests. Establishing a new subsidiary body would be a clear and visible way to address these concerns.

- Current work in relation to pest outbreaks and responses is currently under the oversight of the IC. The IC has made major progress since its establishment, but its Terms of Reference are broad and the FG understands that the IC already has a very full and broad workload. Implementing POARS through an IC Sub-group would merely add to the IC's already heavy workload.
- By establishing the POARSC as a subsidiary body, a clear signal is provided that this is recognized as a top priority for the CPM, and one that therefore needs to be well-resourced. Similar systems in other areas are well supported and it is less likely that the necessary resources would be mobilized if the POARSC was established as an IC Sub-group.
- Furthermore, NROs are currently under the oversight of the IC and the FG agreed that the oversight of the pest reporting obligation should be transferred to POARSC, while the rest of the NROs would remain under the IC (IC Sub-group on NROs). Pest reporting is very important in identifying emerging problems, and timely reports would facilitate early responses to emerging problems. The good functioning of POARS would rely on swift response, capacity building, networking and cooperation between different actors. Having these activities related to emerging pests under one umbrella structure would help ensure faster coordination and better use of resources. In most cases operational procedures are in place and can be used for POARS as well. Some adaptations might be needed though to enable swift actions in case of emergency responses.

[34] It is proposed that this POARSC should be composed of ten members with relevant skills and experience in Pest Alert and Response Systems, including at least one member from an RPPO:

- Seven members will be representatives from each of the seven FAO regions.
- Two members will be experts in subjects relevant to the work of the POARSC, from academia, donors, international organizations or representatives from the private sector.
- One member would be a representative from a RPPO.

[35] The POARSC could have the following functions:

1. *Technical work programme*

- Identify resources and keep under review the capability required by contracting parties to implement the IPPC and POARS activities.
- Identify available mechanisms such as technical cooperation projects to support contracting parties' implementation of POARS in the event of a threat or incursion of an emerging pest.
- Identify and propose strategies for contracting parties to enhance implementation of the IPPC and POARS, including national reporting obligations, taking into account their specific capacities and needs.
- Review contracting parties' challenges associated with the POARS.
- Recommend to CPM priorities to improve the POARS, based on an analysis of outputs from the above activities.
- Identify and recommend new technologies for early detection and response to emerging pest outbreaks which could enhance POARS.
- Monitor and evaluate actions under the IPPC Strategic Framework, other related strategies, frameworks and work plan(s).

2. *Effective and efficient management of the POARSC*

- Develop, agree and maintain a list of priorities for Global Pest System activities in alignment with CPM priorities.

- Provide a review function on new projects related to POARS to ensure that they are aligned with the IPPC strategic objectives, have strategic value and a competitive advantage and recommend them to CPM for approval.
- Develop procedures and criteria for the production, oversight and approval of technical resources for alert and response.
- Recommend to the CPM to establish and dissolve POARSC Sub-groups, undertaking specific activities related to POARS and tasks, which composition and tasks will be defined through Terms of Reference (ToRs).
- Provide oversight to POARSC sub-groups.
- Establish *ad hoc* working groups to address specific issues.
- Seek advice and/or input on matters relevant to its work from technical panels (through the IC) and other groups or organizations that assist the IPPC Secretariat.
- Periodically review its functions, procedures and outcomes.
- Monitor and evaluate the effectiveness of its activities and products.
- Develop projects that contribute to achieving the implementation priorities agreed by CPM.

3. Working with the Secretariat

- Provide guidance on alert and response activities for inclusion in the Secretariat's work plan.
- Assess and prioritize web and technical resources, as appropriate, that are relevant to implement the POARS and the IPPC.
- Promote dispute avoidance as an outcome of effective implementation.
- Oversee the national reporting obligations processes.
- Contribute to the development and maintenance of links with donors, partners and other public and private organizations concerned with alert and response in the phytosanitary area.
- Contribute to the delivery of the IPPC Secretariat's Communications.
- The Secretariat is responsible for coordinating the work of the POARSC and providing administrative, editorial, operational and technical support. The Secretariat advises the POARSC on the availability and use of financial and staff resources.

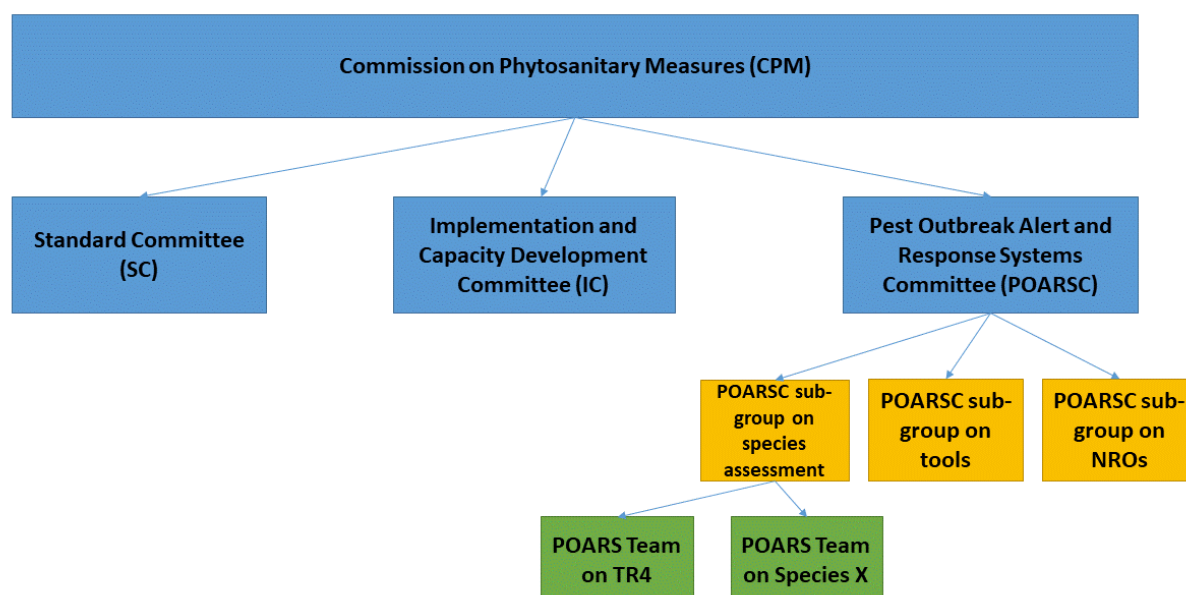
[36] POARSC would collaborate with the IC, which in turn will coordinate with the Standard Committee to make standard setting and implementation complementary and effective on the basis of aligned priorities for the implementation of the POARS. This collaboration will take place at several levels (e.g. Secretariat, chairs, members, stewards and Sub-groups). The POARSC Chair will be responsible to ensure coordination with the IC and the SC Chairs POARSC, IC and SC collaboration will include:

- Alignment of priorities
- Development of implementation plans related to alert and response systems
- Analysis of responses to calls for topics and issues to be addressed
- Review of the Framework for Standards and Implementation jointly and make recommendations to the CPM for endorsement via the SPG.

[37] **Three POARSC sub-groups** would be established for species assessment, tools and NROs and would meet regularly to implement the technical aspects of the POARS, including finalizing the procedure for evaluating species for declaration as emerging pests, and then implementing it.

[38] For each pest declared as “emerging”, a **POARSC Team** could be formed, such as those recently set up for FAW or Foc TR4. The organigramme of the POARSC as a subsidiary body under the CPM is presented in Figure 3.

Figure 3: Organigramme of the POARS Committee as a subsidiary body under the CPM with sub-groups and teams



[39] The POARSC Chair should coordinate with the IC and with the SC when necessary, to ensure synergies in between the activities of the various CPM Subsidiary bodies. In the teams, appropriate expertise on diagnostic should be ensured and linkage to relevant TPDP discipline lead.

[40] **What implications are there for the Secretariat?** It is envisaged that some reorganization of the IPPC Secretariat would be needed to adapt to the establishment of a new subsidiary body. There would be a need for dedicated staff in the Secretariat to support POARS and implement its programme. This activity should be financed partially from the regular budget as well as from extra budgetary funds. There should be a staff retention effort to keep expertise and build on experience gained across the years.

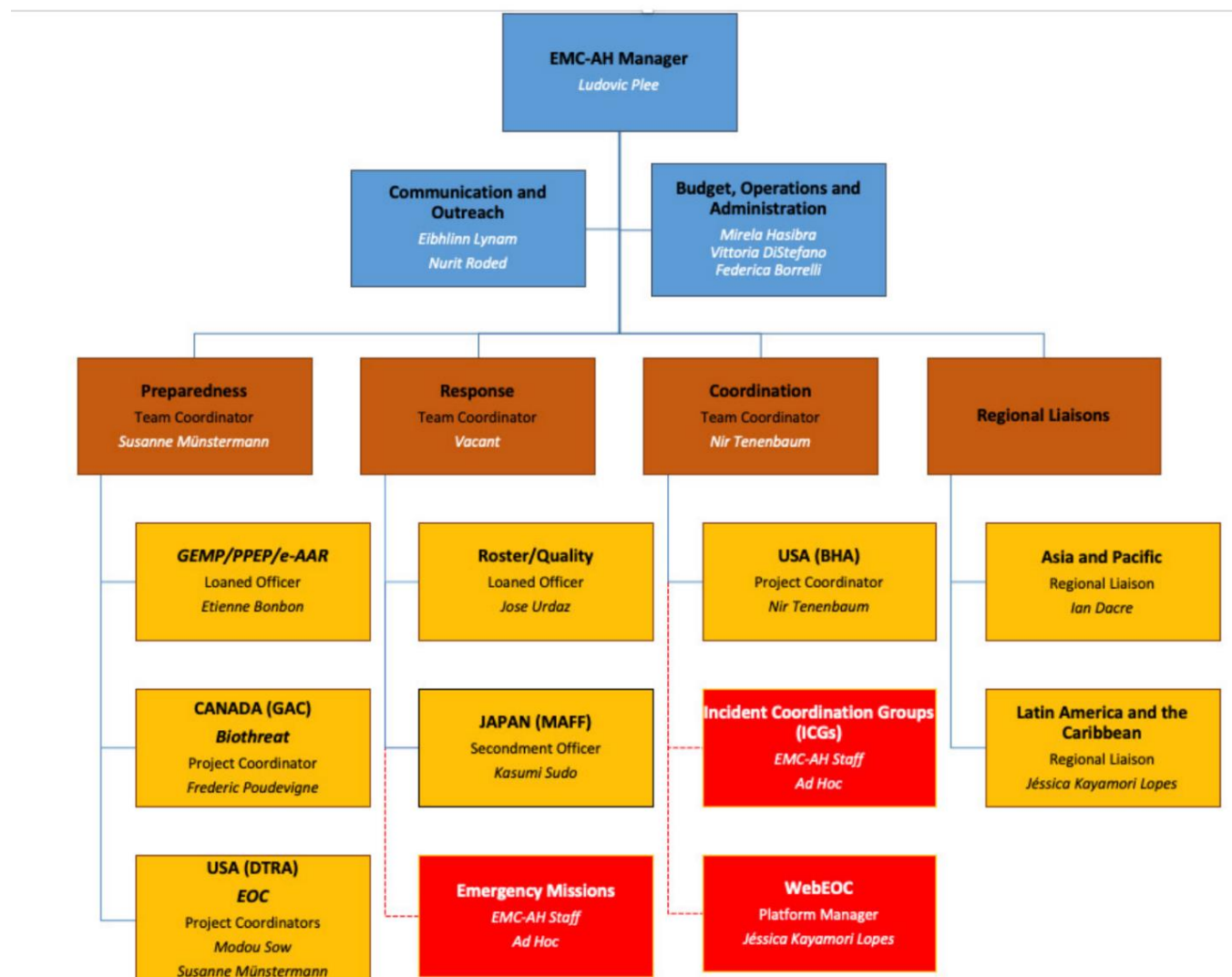
[41] The FG undertook a detailed review of the most prominent alert and response systems across the world to work out how the POARS should be best set.

[42] As an example, in terms of costs of maintenance of the national Argentinian network for surveillance, the development and maintenance of software is 30,000 dollars per year (approximately), and there is also a team of the equivalent of three professionals working on their system.

[43] The organigramme of the Emergency Animal Health Unit within FAO is provided below as an example for animal health alone in Figure 4.

[44] Exploratory discussions have already begun with the Emergency Management Center (EMC) for Animal Health manager to explore the feasibility of working together on a joint programme that could be set to help address emergency activities for both animal and plant health, in order to mutualize resources and to build on experience. The EMC for Animal health is placed under the FAO Emergency unit (OIR) in FAO.

Figure 4: Organigramme of the Emergency Management Center (EMC) for Animal Health Unit within FAO.



[46] **First steps to operationalize POARS.** The SPG expressed concerns about the challenges and long-term impacts of establishing a new CPM Subsidiary body. To explore the potential cost benefits and return on investment, the FG suggests, in agreement with the SPG proposal, **that initially a Steering Group should be established, following the model of the ePhyto Steering Group. This POARS Steering Group could be set up under the oversight of the CPM Bureau and be given a mandate of three years**, with a request to report back to CPM. A proposed POARS Steering Group Terms of Reference has been drafted as is presented in Appendix 1. Representatives from international or regional growers and industry associations or other representatives from the private sector are not foreseen to be necessary in the Steering Group to be set for the initial three years, but could be integrated in the longer term.

[47] This Steering Group would initiate the POARS work plan, in addition it would analyze the pros and cons of setting up a POARS Committee (CPM Subsidiary body) and help to estimate the return on investment.

7. Work plan for POARS

[48] The work plan with main activities as was presented in the Strategic Framework Development Agenda implementation for 2020-2024 document noted by CPM in 2019 remains valid. Table 1 below lists these activities and their status.

TABLE 1 Activities and tasks	Status of the activity
1. Analysis and report – global state of emerging pest risk scanning and reporting, impediments to reporting	Underway-mostly completed, see study.
2. Definition of organizational structure and user requirements needing to be in place for an enhanced scanning and reporting system	See CPM FG POARS proposals.
3. Development and global adoption of enabling policies to encourage and optimise reporting including IPPC mandate and operating structures	See the CPM FG POARS recommendations to the IC Sub-group on NROs. CPM FG POARS recommends setting Epidemic Intelligence from Open Sources (EIOS).
4. Establishment of a network of phytosanitary emergency response expertise/tools and making it available to all NPPOs via a global platform	See the CPM FG POARS proposals.
5. Development, adoption and application of processes for rapidly engaging expertise and response resources	See the CPM FG POARS proposals.
6. Establishment of a POARS toolbox	See the CPM FG POARS recommendations on tools to be developed as well as on the governance to be set to develop these tools.
7. Facilitation of adoption of the POARS globally and advocacy with potential fund providers	Discussions are being held to mutualize activities with the Emergency Management Centre Animal Health Unit within FAO.

Table 1: POARS activities as defined within the Strategic Framework Development Agenda implementation for 2020-2024 documented noted by CPM in 2019 and the status of each activity as of January 2022.

8. Budget to conduct the POARS activities within the IPPC Secretariat

[49] During CPM 14 (2019), the CPM “called on the IPPC Secretariat to establish an emergency trust fund to support addressing issues related to emerging pests and emergency issues. The CPs further encouraged FAO and the IPPC Secretariat to have a holistic rather than a country-by-country approach to deal with emerging pest issues”⁸. The IPPC Secretariat explored this point and considered that the current Multi Donor Trust Fund can be used for this purpose, without creating a new trust fund. Indeed, the CPs and other resource partners have already the possibility to contribute to priority associated with emerging pests and emergency issues in the Multi-Donor Trust Fund.

[50] POARS as proposed, would be a new system, which is inspired by other similar systems such as the one for animal health, but that should be adapted to the peculiarities of plant health. In its initial phase, its structure needs to be based on a small nucleus of fully dedicated staff.

[51] To have a continuous operating capacity and to ensure the sustainability of this system, considerations should be given to allocating some regular budget funds to this work. In addition, extra budget funds could be mobilized.

⁸ FAO, IPPC (2019) Report of the Fourteenth Session of the Commission on Phytosanitary Measures. 295 pages. https://assets.ippc.int/static/media/files/publication/en/2019/07/CPM-14_Report_withISPMs-2019-07-31.pdf

[52] To support the POARS and the initial work of a POARS Steering Group, the following human resources would be needed (estimates in USD):

- 1 manager (P4 level, \$200 K per year)
- 1 dedicated IT developer (P2 level, \$130 K per year)
- Part time administrative person (G3 level, \$40 K per year)
- 2 scientific officers (P2 level, \$140 per year x 2 = 280 K per year)
- 1 human resource for relations with the regions and the RPPOs, the One Health nexus, WHO and other relevant organizations (P3 level, \$160 K per year)
- A part time communication expert (Consultant, \$40 K per year)

[53] A further \$100 k/year should be made available for the procurement of external services such as translation, IT support and experts' meetings. The budget for the staff, including equipment, can be estimated per year as \$950 K.

[54] As a minimum, to start the activities and manage the POARS Steering Group for the first three years, the following staff would be necessary:

- 1 part time manager (P4 level, \$100 K per year)
- 1 part-time dedicated IT developer (P2 level, \$65 K per year)
- Quarter time administrative officer (G3 level, \$20 K per year)
- 1 scientific officer (P2 level, \$140 per year)

[55] As indicated above, at a minimum, a further \$100 k/year should be made available for the procurement of external services such as translation, IT support and experts' meetings, to occur possibly face-to-face.

[56] The IPPC Secretariat would manage the daily activities for the delivery of the POARS work plan.

9. How would field emergency intervention be handled

[57] A well-structured global pest alert and response system should provide guidance and information to CPs on available mechanisms for timely response to emerging pest incursions and outbreaks, which would contribute to preventing potential devastating effects to food production and commercialization.

[58] Emergency interventions for a pest can be of limited duration (few months) or can extend to a few years when necessary. The necessary budget for these types of field interventions may vary depending on the magnitude of the outbreak from a few hundred thousand to several million US dollars. Tools to assist in estimating costs of such an intervention are available for some pests including fruit fly quarantine pests.

[59] The IPPC Secretariat would not be directly involved in on-the-ground emergency interventions. In this regard, the FAO Emergency Management Center (EMC) fills the gap for emerging pests and diseases of concern to animal health. The EMC has an organization structure that includes coordinators at regional level. The EMC is well staffed and adequate financial resources from extra budgetary contributions allow to support Member States in operational matters such as supporting national diagnostic laboratories and field interventions. The EMC has a so-called Incidence Coordination Group (ICG) similar to a Steering Committee, one of its main roles being to define the governance of the participating entities and to engage stakeholders from public and private organizations. It is recommended that a similar setting be established for Plant Health within EMC, possibly under the One-Health-Umbrella initiative.

[60] The CPM *is invited to*:

- (1) *Agree*, as an interim measure, to establish a POARS Steering Group be set to advance the POARS work plan.

- (2) *Agree to the POARS Steering Group* Terms of Reference presented in Appendix 1 (to this paper) and agree to call for experts.
- (3) *Consider* how to allocate resources to ensure the sustainability of POARS, including requesting the IPPC Secretariat to allocate some regular budget funds.
- (4) *Consider* contributing extra budgetary resources to help fund the POARS work plan.
- (5) *Consider asking* the Standards Committee to request the Technical Panel on the Glossary (TPG) to consider the term “emerging pest” for inclusion in ISPM 5 (Glossary of Phytosanitary Terms) and the suggestion made by the FG for this definition.

TERMS OF REFERENCE FOR THE STEERING GROUP OF THE GLOBAL PEST OUTBREAK ALERT AND RESPONSE SYSTEM

1. Background

- [1] During CPM-14 (2019) Member States strongly supported the establishment of a Global Pest Outbreak Alert and Response Systems (POARS), as no such systems exist within the IPPC Community.
- [2] CPM-14 (2019) requested that the Bureau draft an action plan for an IPPC pest emergency system and submit it to CPM-15 (2020) with input from the SPG. The IPPC Secretariat developed this action plan and aligned it with IPPC Strategic Framework development agenda item on “Strengthening Pest Outbreak Alert and Response System”. The concepts of “emerging pests” and “emergency situations” were embedded in this action plan and the scope was limited to quarantine or potential quarantine pests.
- [3] A Focus Group on POARS provided its recommendations in 2022, advocating for the creation of a new CPM Subsidiary body, the POARS Committee. The SPG expressed concerns about the long-term impact and funding implications and challenges of establishing a new CPM Subsidiary body and the need to consider the potential costs, benefits and the return on investment. To explore these elements in depth, the FG suggested, that a POARS Steering Group (SG) could be established as an interim measure, following the model of the ePhyto Steering Group.

2. Purpose

- [61] The POARS SG 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.

3. Duration and Review

- [62] POARS SG will be initially established for three years and will make recommendations for its future to CPM each year.

4. Composition of the Steering Group

- [63] The Steering Group is skills and knowledge based, composed of the following nine members:
- at least one expert from a RPPO
 - at least two experts from NPPOs
 - at least one donor representative
 - at least one international or regional research institution representative
 - at least one representative from an international organization dealing with outbreaks and responses
 - one representative from each of the IC and SC.
- [64] The IPPC Secretariat supports equity, diversity and inclusiveness, and encourages all interested experts to submit their candidature to participate in the POARS SG. The members of this SG will be selected based on their technical and practical expertise in the subject matter. Geographical representation from both developing and developed countries will also be considered to ensure that the outputs are globally relevant, applicable and reflect best practices from all over the world.

[65] The following criteria should be used for selecting SG members:

- Actively engaged in existing global and/or regional pest alert and response frameworks,
- Experience in designing and managing pest alert and response systems,
- Proven experience in promoting and articulating public-private partnerships,
- Full understanding of international phytosanitary standards and legislation.

[66] The Chair will be selected by the membership and will remain chair for the duration of the SG.

[67] The IPPC Secretariat will provide support, coordinate and facilitate the functions of the SG.

5. Reporting

[68] The IPPC Secretariat on behalf of the SG reports to the CPM Bureau.

6. Functions

[69] The functions of the POARS Steering Group will be to:

- Define clearly the relative roles of the POAR Steering Group in relation to IC, to ensure synergy rather than overlap,
- Analyse the pros and cons of setting a POARS Steering Committee and the return on investment among its other functions,
- Ensure coherent implementation of the POARS,
- Establish directives looking into the future,
- Make recommendations for the necessary POARS resources (staff and financial),
- Provide access to existing and new pest alert and response systems,
- Promote and articulate the establishment of a network of international organizations and experts actively involved in Pest Alert and Emergency Response,
- Promote and articulate a network for information exchange and resource mobilization in the event of an imminent threat, incursion or outbreak to facilitate advocacy initiatives with potential donors,
- Set-up working groups to address specific tasks including establishing emerging pest criteria and a clear procedure to assess and rank emerging pests, as recommended by the Focus Group.

7. Funding and organization of meetings

[70] Funding for Steering Group members participation in regular or extraordinary meetings will be provided by the respective members' organizations or through the fund established specifically to support the POARS.

[71] The SG, through the CPM Bureau will provide a report to the CPM. The SG will meet virtually on an *ad hoc* basis as required and if possible will meet at the IPPC Secretariat headquarters in Rome or in another mutually agreed venue.