



联合国  
粮食及  
农业组织

Food and Agriculture  
Organization of the  
United Nations

Organisation des Nations  
Unies pour l'alimentation  
et l'agriculture

Продовольственная и  
сельскохозяйственная организация  
Объединенных Наций

Organización de las  
Naciones Unidas para la  
Alimentación y la Agricultura

منظمة  
الأغذية والزراعة  
للأمم المتحدة

# COMMISSION ON PHYTOSANITARY MEASURES

## Fourteenth Session

Rome, 1-5 April 2019

**Five year strategic plan for ePhyto: Transitioning from project to business  
as usual operation**

**Agenda item 8.6**

**Prepared by the IPPC Secretariat**

## I. IPPC ePhyto Strategic Implementation Plan

1. The Commission on Phytosanitary Measures (CPM) has developed and implemented a solution to advance the global use of electronic phytosanitary certificates (ePhytos) in international trade.
2. The Solution consists of three components:
  - 1) A hub to facilitate the global exchange of electronic certificates between participating countries;
  - 2) A centralized, web-based Generic ePhyto National System (GeNS) to allow countries without the necessary infrastructure to create, send and receive electronic certificates; and
  - 3) A harmonized message format and contents including those referred to in the ISPM 12 (i.e. message schema, accompanying codes, lists and terms to be used in the schema).
3. Since acquiring the resources to facilitate the building of the ePhyto Hub and the GeNS, the Hub became fully operational in June 2018. Those countries that were capable to do so subsequently began exchanging ePhytos on a daily basis. Additional countries are on the verge of exchanging through the Hub in the very near future. Without question, the concept of exchanging phytosanitary certificate data electronically has been proven to work and all indications are that, with adequate sustaining resources, the ePhyto Solution will be a business operation of the Secretariat into the future.

*This document can be accessed using the Quick Response Code on this page;  
an FAO initiative to minimize its environmental impact and promote greener communications.  
Other documents can be consulted at [www.fao.org](http://www.fao.org)*



4. In addition to the building of the ePhyto Hub, the Secretariat also obtained resources to develop the web-based GeNS which will allow countries without their own national systems to be able to access the Hub and exchange ePhytos with any country on the Hub. This is due to the harmonized message format and schema, accompanying codes, lists and terms to be used in the schema which have been developed by the ePhyto Steering Group (ESG). Consequently, the initial reports from the GeNS piloting indicate that then integration of GeNS users into the ePhyto Hub should be relatively seamless once some initial training and facilitation has taken place.

5. The proposed IPPC Strategic Framework 2020 – 2030 prescribes the implementation of a global system for production and exchange of electronic certification information” as one of the key components in its Development Agenda. It specifies key activities to be carried out:

- Successful establishment of the IPPC ePhyto hub as the international system for the exchange of electronic phytosanitary certificates
- Successful establishment of the IPPC ePhyto Generic ePhyto National System (GeNS) for production, sending and receiving of electronic phytosanitary certificates
- Investigate the use of additional messaging and information (such as notices of non-compliance and regulatory import requirements) into the ePhyto Solution.
- Establishment of pilot projects for new or improved capabilities for uninterrupted operation of the hub and GeNS

6. All of the proceeding leads to one key point: the IPPC ePhyto Solution needs to transition from a project to a business as usual operation of the IPPC Secretariat. To facilitate this transition, a number of activities must take place and these are outlined in the Five-Year Strategic Framework attached to this document (Appendix 1).

7. The ESG actively developed the Framework, and it was presented to the IPPC Strategic Planning Group (SPG) in October, 2018 for review and comment. The plan received very few comments, which were addressed, and the SPG agreed that the plan would be submitted with the requested changes made, to CPM-14 for approval.

## **II. Recommendation**

8. The CPM is invited to:

- 1) *approve* the implementation plan and,
- 2) *promote* the use of the IPPC ePhyto Solution as an additional option for exchanging phytosanitary data between contracting parties to facilitate and enhance safe trade.

# IPPC ePhyto Strategic Implementation Plan 2019 - 2023

---

## Vision of the IPPC ePhyto Solution

Phytosanitary certificates for the trade of plants and plant products are electronically exchanged in a safe, secure and efficient manner between national plant protection organizations

## Goal of the Commission on Phytosanitary Measures for the IPPC ePhyto Solution

All contracting parties to the IPPC have access to technology supporting the exchange of electronic phytosanitary certificates (ePhytos)

### Introduction

The Commission on Phytosanitary Measures (CPM) has developed and implemented a solution to advance the global use of electronic phytosanitary certificates (ePhytos) in international trade. The Solution consists of three components:

1. A hub to facilitate the global exchange of electronic certificates between participating countries;
2. A centralized, web-based Generic ePhyto National System (GeNS) to allow countries without the necessary infrastructure to create, send and receive electronic certificates; and
3. Harmonized message format and contents including those referred to in the ISPM 12 (i.e. message schema, accompanying codes, lists and terms to be used in the schema)

The ongoing operation of the Solution is the responsibility of the IPPC Secretariat. The Secretariat, housed within the Agriculture Division of the Food and Agriculture Organization (FAO) of the United Nations, is to support the operation of the Solution. The Solution must operate in a stable and sustainable manner, as countries continue to adopt ePhytos to facilitate trade. This strategic implementation plan 2019-2023 (SIP) has been developed to facilitate transition from a project with defined funding to a program administered by the IPPC Secretariat. The SIP lays out the strategic objectives and outcomes in alignment with the IPPC Strategic Framework 2020 – 2030.

### Strategic Objectives

The proposed IPPC Strategic Framework 2020 – 2030 prescribes the implementation of a global system for production and exchange of electronic certification information” as one of the key components in its Development Agenda. It specifies 5 key activities to be carried out:

- Successful establishment of the IPPC ePhyto hub as the international system for the exchange of electronic phytosanitary certificates
- Successful establishment of the IPPC ePhyto Generic ePhyto National System (GeNS) for production, sending and receiving of electronic phytosanitary certificates
- Investigate the use of additional messaging and information (such as notices of non-compliance and regulatory import requirements) into the ePhyto Solution.
- Establishment of pilot projects for new or improved capabilities for uninterrupted operation of the hub and GeNS

The ePhyto Solution project has completed the development of IT systems for use by contracting parties. The SIP implements the activities outlined in the IPPC Strategic Framework 2020 – 2030 with an initial focus on implementation of the systems by countries, securing uninterrupted service and establishing effective governance and financial management structures for its long term operation.

This plan proposes the following medium term agenda for 2019 to 2023, to achieve the activities outlined in the IPPC Strategic Framework 2020 – 2030:

1. Stable operation of the hub and GeNS to permit implementation by contracting parties;
2. Sustainable financial operations
3. Implementation of a donor strategy;
4. Monitoring and reporting on the performance of the Solution;
5. Fully-funded capacity development strategy separate and distinct from a sustained ePhyto operational fund;
6. Monitoring and reporting on financial management;
7. Communications and advocacy strategy
8. Cost-benefit analysis;
9. Long term cost recovery plan to maintain ongoing operation including change management, and;
10. Cooperation with international and regional partners to advance interoperability, system sharing and cost reduction

The core elements of this agenda are governance, operations, finance, country implementation, communication and international cooperation. The key results expected by 2023 and annual key milestones are outlined in Annex 1.

The IPPC Secretariat commissioned Trade Development and Facilitation (TDAF) Consulting to evaluate options for a business model for the operation of the ePhyto Solution. In June 2018, TDAF presented a report to the Secretariat. This report was fully considered by the IPPC Secretariat and the IPPC ePhyto Steering Group (ESG) for the development of the SIP. Where appropriate, the references to the specific recommendations are added to the text.

## Governance

The IPPC Strategic Framework 2020 – 2030 proposes that the “*operation of an export system capable of providing official assurances through phytosanitary certification*” falls within the core activities of implementation and capacity development (ICD). However, the ICD unit of the IPPC Secretariat is not resourced to oversee the operation of the ePhyto Solution and as an alternative establishing an independent trade facilitation unit within the Secretariat is strongly recommended. Such a unit could address issues on e-commerce, sea containers, and others relevant to the implementation of the Trade Facilitation Agreement in the context of trade in plants and plant products. Countries have provided donor support to fund the staff associated with the project and this will need to continue until sustained funding arrangements are in place.

Operation of the technology will be provided by the United Nations International Computing Centre (UNICC) under service delivery agreements (SDAs) with the IPPC (FAO). The SDAs provide for the operation of the systems and a technical help desk to address technology issues. This will ensure that, as a minimum, continuous operation of the Solution is assured.

Other administrative services related to operation of the Solution would be provided by the IPPC Secretariat<sup>1</sup>. A two person team would be responsible for carrying out the following activities:

- business help desk support to national plant protection organizations,
- supervision, evaluation, and administration of agreements with UNICC to deliver systems operation;
- engagement with donors;
- financial accountability to donors;
- reporting to CPM;
- monitoring of advances in electronic certification; engagement and collaboration on interoperability, information and technology sharing of systems including industry advances

This unit would be separate and independent, reporting directly to the Secretary. The delivery of services by the IPPC Secretariat should be fully evaluated well in advance before the completion of the SIP to determine if the staffing is required, adequate or whether some services may be better managed outside of the Secretariat or by other organizations<sup>2</sup>.

#### *Key results:*

1. CPM-14 (2019) approval of the IPPC ePhyto Strategic Framework 2019-2023
2. A separate and independent IPPC ePhyto unit established within the IPPC Secretariat in 2019;
3. Confirmation of the staffing requirements for the IPPC ePhyto unit to be presented to CPM-2019;

---

<sup>1</sup> TDAF Consulting recommendation 7: The IPPC Secretariat should continue to provide the ePhyto Solution Management and Administration function, as the ePhyto Solution will be core to the overall delivery of IPPC Phytosanitary Certificate support services.

<sup>2</sup> TDAF Consulting recommendation 6: Consideration should be given regarding the operation and provision of the Business Support Desk, including exploring possibilities for support from Regional Plant Protection Organizations (RPPOs), leading NPPOs and Industry.

TDAF Consulting recommendation 10: The adequacy of the proposed IPPC Secretariat support resources for the ePhyto Solution should be reviewed in relation to the actual tasks to be undertaken.

4. Annual reports presented to CPM on the performance of the system, the operation of the ePhyto unit and recommendations to advance interoperability of ePhyto with other international electronic certificate initiatives or industry systems

### Operation

Service Delivery Arrangements (SDAs) with UNICC to provide the operating technology have been established and will remain in effect until terminated by either party. These should be reviewed by IPPC/FAO and UNICC on a routine basis (a minimum of every 24 months) to ensure that the technology remains responsive to the users and technology advances are incorporated, when appropriate. A detailed process of change management should be established by early 2019. The processes should be sensitive to the differences in ability of NPPOs to adopt changes. Any changes in the services should be reflected through the establishment of change requests, which should be clearly communicated to users through established and maintained channels, well in advance of enacting changes. Operational changes should be communicated as part of annual reporting described in the section on governance. User surveys or the establishment of user groups to provide feedback on operation should be established to facilitate environmental scanning and continuous improvement.

The adoption of ePhytos by countries is expected to steadily increase as access to electronic exchange technology is simplified and improved. Benefits to traders and governments through increased efficiencies and effectiveness should result in steady adoption of electronic certificate exchange. To encourage steady adoption of the Solution, a program of advocacy should also be established based on a thorough analysis of the impacts to trade (see cost-benefit analysis described in finance below). The IPPC Secretariat must also anticipate higher than expected demand for use of both the GeNS and Hub and must ensure that SDAs can accommodate service expectations. A preliminary study of impacts to trade is being conducted by the ePhyto Industry Advisory Group (IAG) working with the NPPOs who have adopted the Hub. The study design and results of this effort should be reviewed and expanded to include a specific monitoring of the full impacts implementation to governments and traders.

#### *Key results:*

1. Service Delivery Agreements with UNICC routinely reviewed and adjusted,
2. Steady increase in the adoption of the Hub and GeNS by 2023.
3. Contingency arrangements in place to manage greater than anticipated demand by 2020
4. NPPOs and traders of plants and plant products report improved efficiencies in trade moving between countries through the exchange of electronic certificates by 2023
5. A detailed process of change management to be developed and implemented by end of 2019.
6. Explore and test the operation of other electronic certificates through the Hub by the end of 2020

### Finance

The operation of the hub and GeNS is anticipated to cost approximately U.S. \$866,000 annually<sup>3</sup> as described below:

<i>Service</i>	<i>Cost (U.S. \$)</i>
Hub operating costs (UNICC)	90,000
GeNS operating costs (UNICC)	246,000
IPPC ePhyto unit (estimated)	250,000
System enhancements	80,000
Advocacy, analytical research and delivery	200,000
Total operating costs	866,000

The operating costs include specific operational enhancements to the technology, and cost benefit analysis. Additional costs may be incurred to improve the operation of the hub and/or GeNS, although some potential costs are included within the existing SDAs. A more detailed analysis of the operating costs will be completed early in the operation of the plan including consideration of the IPPC Secretariat costs<sup>4</sup>.

Following consideration of a number of models proposed by TDAF, a donor funding model was considered the most feasible at the present time. The donor funding model should be established in the short term (2019-2023) until a full cost-recovery model, based on a thorough cost-benefit analysis, is developed<sup>5</sup>. Additional funding options should be further examined during the first three years of this plan so that a long term operating model, that may include a balance of cost recovery options<sup>6</sup>, can be implemented prior to 2023.

The current estimates for operating the Solution do not account for additional overhead costs to the IPPC Secretariat in maintaining the various standards and technical information associated with the systems. For example, the messaging structure may continue to require support from member countries to keep it compliant with adjustments arising from interoperability. Additionally, technical documents regarding operating the systems may continue to require revision. The costs of holding meetings; support to developing countries to attend meetings; and other activities may add to the overall costs of operating the Solution. These activities are considered to be within the context of the normal operating activities of the Secretariat, but these ongoing costs should be identified.

<sup>3</sup> Based upon estimates developed by Trade Development and Facilitation Consulting, 2018

<sup>4</sup> TDAF Consulting recommendation 1: Additional research should be undertaken by the IPPC regarding potential direct and indirect benefits of the IPPC ePhyto Solution, including time and cost savings and economic efficiencies. Capacity building requirements should also be more fully elaborated through the Pilot

<sup>5</sup> TDAF Consulting recommendation 20: A Multi Donor Trust Fund (MDTF) should be established as the preferred initial funding mechanism for the ePhyto Solution, covering the initial 5 years and extendable for additional years. An MDTF project document should be prepared by the IPPC Secretariat for this purpose

<sup>6</sup> TDAF Consulting recommendation 23: The IPPC should use the 5 year MDTF period to review alternative funding options, such as funding by FAO, a Participant Based Funding model or a combined approach. This review should start immediately after the launch of the MDTF, with a preliminary report prepared by the end of Year 1 and a final recommendation by the end of Year 2. Mechanisms for the new agreed model should be ready before the end of Year 3.

The IPPC Secretariat is conducting a cost-benefit analysis to identify specific economic benefits in government and industry operations as well as improvements to national and international biosecurity. The analysis will provide support to the development of a donor funding strategy.

A donor funding strategy should be established by the end of 2019 with specific objectives, the processes to be undertaken for cultivating and retaining donors, and an agreed framework for monitoring and reporting of the funds. Funding levels will need to be sufficient in order to ensure that service levels are not reduced as a result of insufficient funding. Donor funding must be sufficient and ongoing.

Donor funding contributed to ePhyto should be protected from use in other IPPC Secretariat activities. To ensure transparency and to maintain the confidence of donors, a multi-donor trust fund specific to the funds for ePhyto could be established early in the implementation strategy. Reporting on the use of funds will be a key element of governance reporting based on agreed expenditure plans<sup>7</sup>.

The absolute bare minimum required for the ePhyto solution is US\$496,000. This amount is not optional. In the absence of this amount annually, the ePhyto solution cannot continue.

*Key results:*

1. Donor strategy adopted by CPM-2020 for implementation.
2. Minimum of 5 years funding at \$1,000,000 per annum obtained to operate the Hub and GeNS
3. Separate financial mechanisms for ePhyto operations and ePhyto capacity development considered for establishment, funding and execution by end of 2019
4. Cost-benefit analysis of ePhyto implementation presented to CPM-15 (2020)
5. Long term funding strategy , approved by CPM-17 (2022) and implemented by July 2023

### **Country implementation**

The GeNS is intended to be available to countries without national systems capable of producing, sending and receiving ePhytos. The support required by countries to implement the Solution varies by country; with many able to implement the GeNS operation without any retooling of phytosanitary certificate business processes by either the NPPO or the trader. The Solution project has produced guidance for implementing the hub and GeNS. These guides should continue to be reviewed by countries implementing the system and updated, as necessary, to ensure they remain effective.

The IPPC Secretariat core ePhyto program will provide the minimum tools that describe how to use the technology. These tools will include advisory and consulting services (country assessments, technical requirements, etc.) provided by current ESG members. The IPPC Secretariat Implementation Facilitation Unit may support country capacity development, dependent on available resources, or available partnerships with other interested organizations.

---

<sup>7</sup> TDAF Consulting recommendation 22: Clearly delineated budget lines, with full accountability and auditing, should be established within the MDTF for each key area, including Administration, Additional Development and Support; and Capacity Building



The IPPC Secretariat is developing a partnership with the World Bank in its efforts to implement the World Trade Organization's Trade Facilitation Agreement (TFA), as the amount of resources generally available to the Secretariat are consistently limited.. Under the proposed agreement, the World Bank would assist countries that have indicated that they do not have the capacity to implement the Solution without help and also attempt to secure donor funding to improve the capacities of countries to implement ePhyto within an overall implementation of trade facilitation and border management improvement. The World Bank, as well as any other organization interested in an implementation partnership, will under the full direction of the IPPC Secretariat, provide assistance to countries in implementing the Solution within a comprehensive approach to implementing the WTO TFA. The IPPC Secretariat will continue to work with the World Bank and any other interested organizations in developing tools for use by countries to implement the solution independently or with the assistance of countries or regions with experience in implementation<sup>8</sup>. The ePhyto Solution is and shall remain an IPPC Secretariat operation.

RPPOs and NPPOs with sufficient resources and understanding of the technology and the business processes should support implementation where possible. To ensure consistency and universal availability, the development of guidance material that could be used by RPPOs and countries to assist other countries in implementing ePhyto should be coordinated by the Secretariat. This would expand on existing tools developed under the project and could be a key component of an RPPO's annual work plan.

The IPPC Secretariat will seek donor funding from industry and NPPOs to support the development of these tools and to deliver awareness and training through workshops or global symposia on ePhyto<sup>9</sup>. The Secretariat will also coordinate to raise awareness for ePhyto at meetings hosted by other organizations (e.g. regional trade facilitation workshops, customs meetings, etc.) as a basis for leveraging additional investment.

*Key results:*

1. Tools for implementation of the Hub and GeNS business process made available to all contracting parties by the end of 2019
2. Agreement to support capacity development for implementation of ePhyto between the IPPC Secretariat and World Bank established in 2019
3. At least 2-3 countries per year supported in implementing ePhyto.
4. Periodic awareness workshops on ePhyto

**Communication and International Cooperation**

---

<sup>8</sup> TDAF Consulting recommendation 13: The IPPC Secretariat should develop training webinars and on-line videos describing the ePhyto Solution.

<sup>9</sup> TDAF Consulting recommendation 14: The IPPC Secretariat should continue the ePhyto Symposium series and organize a global ePhyto seminar or workshop, at least once in every 2 years, to provide training and opportunities for exchange of experiences.

Funding to support operations is contingent on a number of factors including national and international effectiveness, overall use and user satisfaction. A program to encourage adoption and use support funding creates advantages through economies of scale.

A documented program of communication and advocacy to sell the benefits of ePhyto is a key component of work of the IPPC Secretariat<sup>8</sup> and aligns with the overall [IPPC Communication Strategy](#). The tools used should include those described within the [IPPC Communication Strategy](#), but in particular should include workshops and communications materials that assist countries in adopting ePhyto. The communications and advocacy program will require adequate funding to achieve the proposed milestones<sup>10</sup>.

International cooperation should focus on integration and harmonization between ePhyto and other electronic certification initiatives and activities, as well as ensuring its compatibility with the global implementation of single window functions. Other regulatory bodies including the Codex Alimentarius Commission and the International Organization for Animal Health (OIE) (the other two SPS “Sisters”) are embarking on expanding existing guidance for electronic certificates. Collaboration on harmonization would assist countries in developing systems capable of handling various SPS certificates thus simplifying border activities. Harmonization would also assist in facilitating safe trade and improving biosecurity. The IPPC Secretariat will work with other international organizations to explore the exchange of electronic certificates through the Hub with benefits to IPPC by simplifying the process of exchange for countries, reducing operational costs through economies of scale and increasing the viability of the Hub service.

As countries implement single windows and adopt paperless trading mechanisms, the alignment of ePhyto data with the appropriate elements of the World Customs Organization data model should be investigated thoroughly; the Secretariat has initiated this activity. The Secretariat should proactively work with interested international organizations and with its contracting parties to undertake an analysis of alignment to allow countries to make informed decisions on how ePhyto can be used within single windows and Customs systems.

*Key results:*

1. Communication and advocacy program adopted by CPM-2020 for implementation.
2. Advisory group on exchanges of electronic certificates established by the end of 2020
3. Evaluation of the relationship of ePhyto and the Customs Data Model completed by the end of 2020.

---

<sup>10</sup> TDAF Consulting recommendation 8: Programme evaluation and promotion should be included as core elements of the ePhyto Solution programme budget, within the Management and Administration framework

Annex 1 – Key milestones

Strategic objectives	2019	2020	2021	2022	2023
<b>Governance</b>  1. <i>Stable operation of the hub and GeNS to allow implementation by contracting parties;</i> 2. <i>Monitoring and reporting on the performance of the solution;</i> 3. <i>Monitoring and reporting on financial management</i>	<ul style="list-style-type: none"> <li>- CPM endorsement of Strategic Implementation Plan,</li> <li>- Establishment and implementation of strategic plan</li> <li>- IPPC ePhyto operations unit established</li> <li>- Conduct routine review of UNICC-IPPC contract</li> </ul>	<ul style="list-style-type: none"> <li>- Annual program report (including financial and operational assessment) presented to CPM</li> </ul>	<ul style="list-style-type: none"> <li>- Annual program report (including financial and operational assessment) presented to CPM</li> <li>- Contract with UNICC reviewed, updated and reconfirmed</li> <li>- Independent assessment of IPPC ePhyto Operations Unit's delivery of required services completed and presented to CPM</li> </ul>	<ul style="list-style-type: none"> <li>- Annual program report (including financial and operational assessment) presented to CPM</li> <li>- Mid-term evaluation of strategic plan</li> </ul>	<ul style="list-style-type: none"> <li>- Annual program report (including financial and operational assessment) presented to CPM</li> <li>- Contract with UNICC reviewed, updated and reconfirmed</li> </ul>
<b>Operations</b>  4. <i>Stable operation of the hub and GeNS to permit implementation by contracting parties;</i> 5. <i>Cost-benefit analysis</i>	<ul style="list-style-type: none"> <li>- Hub &amp; GeNS fully operational</li> <li>- Business support help desk defined</li> <li>- 10 countries in total connected to hub using national systems</li> </ul>	<ul style="list-style-type: none"> <li>- Systems operation and technical assessment completed</li> <li>- Contingency plan to deal with higher than anticipated uptake</li> <li>- Business support help desk established</li> <li>- 15 countries in total connected to hub using national systems</li> <li>- Continued work on harmonization of data within the ePhyto (codes, etc.)</li> </ul>	<ul style="list-style-type: none"> <li>- 20 countries in total connected to hub using national systems</li> <li>- OIE and/or Codex trials of certificates through the hub completed</li> </ul>	<ul style="list-style-type: none"> <li>- 25 countries in total connected to hub using national systems</li> </ul>	<ul style="list-style-type: none"> <li>- Systems operation and technical assessment completed</li> <li>- 30 countries in total connected to hub using national systems</li> <li>- Detailed satisfaction surveys completed</li> </ul>

Strategic objectives	2019	2020	2021	2022	2023
<p><b>Finances</b></p> <p>6. <i>Sustainable financial operation based upon a donor strategy</i></p> <p>7. <i>Monitoring and reporting on financial management</i></p> <p>8. <i>Cost-benefit analysis</i></p> <p>9. <i>Long term cost recovery plan to maintain ongoing operation</i></p>	<ul style="list-style-type: none"> <li>- Detailed report of costing of operational components) provided to CPM Bureau</li> <li>- Separate accounting systems for 1) Operation of the Solution and 2) capacity development established</li> <li>- Donor funding strategy approved by CPM</li> <li>- Cost-benefits analysis initiated and completed</li> <li>- At least 5 donor countries supporting operations</li> </ul>	<ul style="list-style-type: none"> <li>- At least 5 donor countries supporting operations</li> <li>- Analysis of potential options for long term funding based</li> </ul>	<ul style="list-style-type: none"> <li>- At least 5 donor countries supporting operations</li> <li>- Options for long-term (beyond 2023) funding and financial management presented to CPM-16 (2021)</li> </ul>	<ul style="list-style-type: none"> <li>- Long term funding model and fund management defined -</li> </ul>	<p>Long term funding model and fund management presented to CPM and implemented</p>
<p><b>Country Implementation</b></p> <p>10. <i>Stable operation of the hub and GeNS to permit implementation by contracting parties</i></p> <p>11. <i>Fully-funded capacity development strategy</i></p>	<ul style="list-style-type: none"> <li>- Establish capacity development and country implementation strategy</li> <li>- Capacity development partnership established in partnership with World Bank</li> <li>- Training tools for implementation (e.g. self-assessment modules, etc.) established</li> </ul>	<ul style="list-style-type: none"> <li>- At least 10 countries using the GeNS</li> <li>- At least 5 donors support capacity development</li> <li>- Uptake/effectiveness of training tools evaluated and reported to CPM</li> <li>- International symposium on ePhyto completed</li> </ul>	<ul style="list-style-type: none"> <li>- At least 20 countries using the GeNS</li> <li>- At least 10 donors to support capacity development</li> </ul>	<ul style="list-style-type: none"> <li>- At least 10 donors to support capacity development</li> <li>- Needs assessment for further global seminars or workshops reported to CPM</li> </ul>	<ul style="list-style-type: none"> <li>- At least 30 countries using the GeNS</li> <li>- At least 10 donors to support capacity development</li> </ul>

Strategic objectives	2019	2020	2021	2022	2023
<p><b>Communication and international cooperation</b></p> <p>12. <i>Communications and advocacy strategy</i></p> <p>13. <i>Cooperation with international and regional partners to advance interoperability and cost reduction</i></p>	<ul style="list-style-type: none"> <li>- RPPOs to provide country level training support</li> <li>- Communication and Advocacy and plan endorsed by CPM</li> <li>- Cooperative agreement between World Bank and IPPC to support country implementation of GeNS established</li> </ul>	<ul style="list-style-type: none"> <li>- Advisory group on interoperability and integration between ePhyto and other e-certificate exchange initiatives established</li> <li>- Alignment of WCO Customs data model to ePhyto</li> <li>- Investigate the development of a strategy for interoperability with National Single Windows, Customs data model and other electronic certificate information exchange</li> <li>- Assessment of data harmonization between Single windows and ePhyto completed and reported to ePhyto Steering Group</li> <li>- 4<sup>th</sup> IPPC Global ePhyto Symposium</li> </ul>	-		