



ePhyto Factsheet #7

www.ippc.int

The Global ePhyto Hub

What is the ePhyto system?

The ePhyto system consists of two main elements, production/receipt of ePhytos and a mechanism for exchange. The production and receipt of ePhytos are part of a national system. The exchange may be done in two ways, either directly between National Plant Protection Organizations (NPPO) referred to as point-to-point exchange (see Figure 1) or by way of a central hub referred to as single point exchange (see Figure 2).

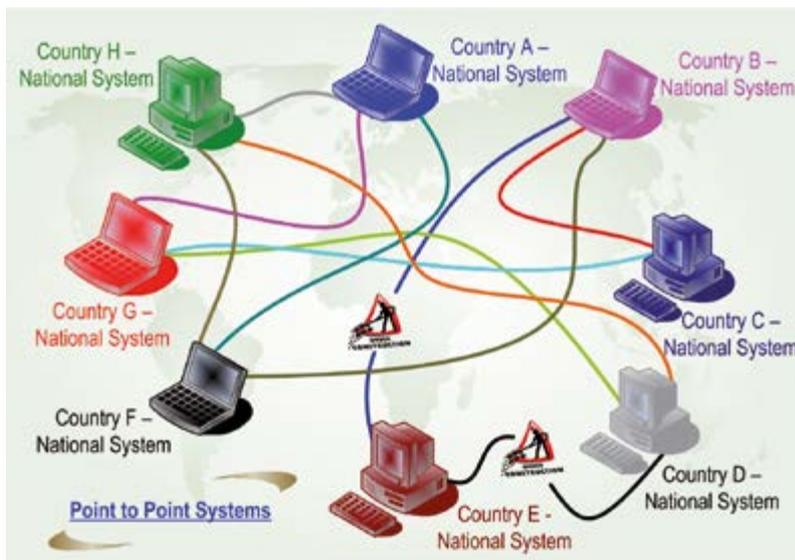


Figure 1

Point to point systems require that each NPPOs develop their own national system and bilaterally agree with other NPPOs to exchange certificates.

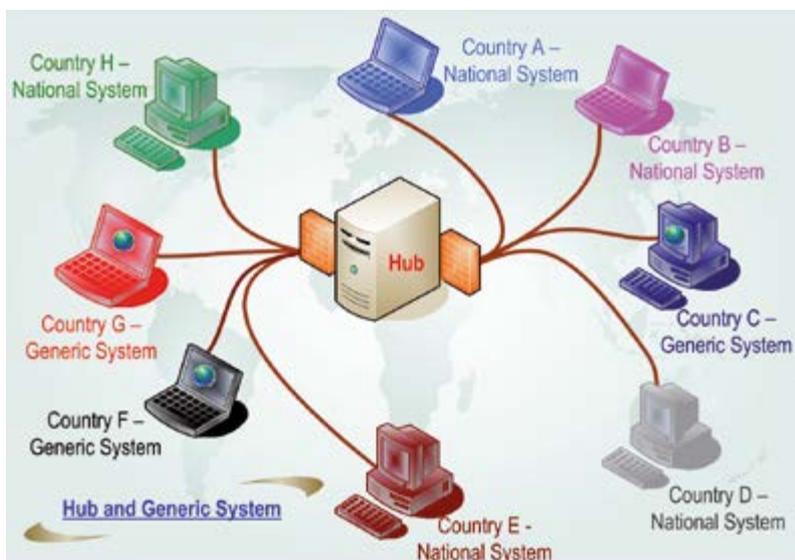


Figure 2

The hub and generic system allows NPPOs to exchange certificates with any other NPPOs on the system based upon harmonized rules for participation.

What is the Global ePhyto Hub?

The Global ePhyto Hub is a central exchange system for ePhytos that can be used by many countries linked to the hub. Under this system, an exporting NPPO can transfer an ePhyto via a secured system to the hub. The hub will then transfer the ePhyto to the importing country's "mailbox" through the hub and the importing country can retrieve the ePhyto from the hub. The hub establishes common procedures for transmission and retrieval of ePhytos for all countries that participate in the hub. This eliminates the need for multiple bilateral access agreements and enables all countries (NPPOs) that adopt the hub protocols to exchange electronic certificates with one another.

What if my country already has a point-to-point national system for transmission of electronic phytosanitary certificates?

Countries with a national system which may be operating in a point to point system for exchanging ePhytos may also exchange ePhytos using the hub provided required adjustments are made to the system. Once compliant with hub business requirements, they will be able to transmit ePhytos through the hub if the importing NPPO is also using the hub. NPPOs with national systems also can choose to transmit to countries with point-to-point systems in lieu of the hub. However, one advantage of the hub is that the exporting NPPO does not have to modify their system each time they want to start sending ePhytos to a new importing NPPO, if that country is participating in the hub.

Could a country join the hub if it does not have a national system?

All countries capable of meeting established standards can use the hub. Countries without a national system could access the hub by way of a generic national system that is to be developed by the IPPC.

How does my country participate?

After the development of the hub, the CPM Bureau has selected countries to participate in a pilot which will test electronic exchanges through the hub. The IPPC ePhyto Steering Group (ESG) working with the service provider and international organizations will assess the success of the pilot at its conclusion. Once any required adjustments are completed to improve operation, access to the system should be available to all interested countries. The benefits of participating on an ePhyto hub is further detailed in the web link: <https://www.ippc.int/en/ephyto/>

Hub business rules

- Use of the hub is voluntary
- The hub is a central multilateral system
- The hub should be accessible at all times
- No information (messages, transactions) should be lost
- The hub allows for a single exchange protocol
- The version of UN/CEFACT schema in use, at a given time, is established by the IPPC
- Participating countries will require a national system or may use a generic system to exchange ePhytos through the hub
- An envelope containing only basic information is used by the hub to send the message to the correct destination
- The reception of the message by the hub, and the delivery of the message by the hub to the destination are not synchronized
- The messages are kept in the hub temporarily, until they are confirmed as received by the final destination at which time the message data in the hub will be deleted
- The hub will conduct verification on the transmitted ePhytos (envelopes only)
- The hub doesn't validate the ePhyto (message) content. The privacy of the message content is maintained through the transaction and only the destination NPPO will read the message
- The hub allows for encrypted transfer of ePhyto data between countries
- Authentication will be used to ensure the identity of both sending and receiving NPPOs.

Scheduled and notified change management processes will be used when changes in schema or exchange protocols are required.

How will the pilot operate?

The pilot is expected to commence in 2016. A number of countries will be selected by the ESG based upon a number of factors including volumes of trade, legislative and technical infrastructure, etc. NPPOs will connect to the hub to begin transferring electronic certificates. In addition to transferring electronic certificates through the hub, NPPOs will continue to issue paper certificates as a means to verify that the system operates in an efficient manner and to provide a backup for any system issues.

When can my country participate?

The hub and the generic national system will first be tested by a limited number of countries. These countries will have to contribute extra resources to the testing and evaluation of the first version of the hub and generic national system. This is particularly true of countries participating in the generic national system. Pilot testing is expected to occur in the second half of 2016. The hub and the generic national system will be adjusted following the pilot, if necessary.

In 2017, the hub and the generic system will be available for wider use and gradually more countries will be able to participate. Countries that have a national system to produce or receive ePhytos can participate in the hub once they have adjusted their system to the requirements of the hub. Countries without a national system will be invited to gradually start participation once the pilot and reconfiguration is complete. The number of countries that can participate in 2017 depends on the resources available and also on the availability of the system and training material in different languages. Within the context of the STDF project, the participation of countries in 2017 will be supported by training material developed in different languages, by in-country training and by assisting countries with arranging necessary infrastructure. Gradually more and more countries can participate to truly create a Global ePhyto Solution.

Additional resources

The IPPC website has a lot of information on the history of ePhyto development – use the links below to find out more information:

- [IPPC ePhyto – home page](#)
- [IPPC ePhyto – Steering Group and recent developments](#)
- [IPPC ePhyto – codes and schema](#)

Contact us

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