1. How can developing countries enter into electronic certification?

To trade all countries currently need to have at least a manual/physical system to verify that exports meet importing NPPO requirements and to issue a phytosanitary certificate providing the required declarations.

To participate in electronic certification a country would need to have an electronic certification system that has a least the following functionality:

- Enter phytosanitary certificate data electronically
- Produce phytosanitary certificates (ePhytos including electronic and/or paper)
- Send ePhytos
- Store of electronic phytosanitary certificate data
- Receive ePhytos
- Decrypt ePhytos
- Validate the structure of the ePhyto message
- Read/view/print/produce pdf of ePhytos

The IPPC ePhyto Steering Group is currently exploring options that could assist countries to have this capacity. One option is for the IPPC to build a simple generic web-based system which has this functionality. Any country could then sign-in and use this web-based system. Other ‘off-the-shelf’ existing systems are also being explored e.g. ASYCER developed by UNCTAD.

2. Can I still use the hub if I don’t have an electronic certification system?

To use the hub you need to have the capacity to produce electronic certificates (ePhytos). The IPPC ePhyto Steering Group is currently exploring options that could assist countries to have this capacity. One option is for the IPPC to build a simple generic web-based system which has this functionality. Any country could then sign-in and use this web-based system. Other ‘off-the-shelf’ existing systems are also being explored e.g. ASYCER developed by UNCTAD.

3. What if my country has already got a point-to-point system?
Countries that already have a point-to-point system will be able to use the hub easily. They will be able to transmit ePhytos to the hub if the importing NPPO is also using the hub, or they can transmit point-to-point to countries that also have a point-to-point system. One advantage of the hub is that the exporting NPPO with a point-to-point system will not have to adapt their system when they want to start sending ePhytos to a new Importing NPPO.

4. **Is it necessary or even feasible to have ePhyto exchanges occurring point-to-point between some countries and through a hub for other countries?**
An NPPO of an exporting country can continue using point-to-point exchange with some NPPOs while exchanging via the hub with other NPPOs, these two exchange systems can exist next to each other. It could be beneficial to use the harmonised protocols developed for the exchange via the hub also for the point-to-point exchange.

5. **What is the timeline for developing the hub?**
The timeline is dependent on CPM decisions. If CPM 10 (2015) decides to proceed with the hub then it could be piloted by a limited number of countries within 18 months, and depending on the extent of changes needed, available for wider use 6 months later.

Once the hub has been developed and piloted, NPPOs can start using it as soon as the NPPO of the importing country has agreed to receive ePhytos via the hub from the NPPO of the exporting country.

6. **What physical/paper-based systems are also needed to support electronic certification processes?**
An NPPO will need to maintain a phytosanitary certification system consistent with ISPM 7. This requires many physical systems to be established and maintained. Some aspects of the system can be done electronically, e.g. record-keeping.

When electronic exchange of ePhytos first starts between two NPPOs it is likely they will want to keep using paper certificates until they have good confidence in the electronic system. This may take 6 – 12 months depending on the volume of trade. Once both NPPO’s agree and their legislation allows it, paper certificates could stop being produced and NPPOs would rely on just the ePhyto.

7. **What regulatory barriers may need to be overcome in order to use electronic phytosanitary certification and send information via a hub system?**
Each contracting party will need to assess their own regulatory environment to determine if there are any impediments to sending or receiving phytosanitary certificate information electronically, e.g. through the Hub. Such considerations may include:
• Does transmission of data through the hub meet national data security standards?
• Does legislation require paper certificates or are electronic certificates acceptable?
• Does legislation require wet signatures and stamps or will electronic means of authentication suffice?

Each NPPO will need to determine if changes to their legislation or regulations are necessary before they can send or receive ePhytos or participate in the hub.

8. Can the Hub serve as a system to notify non-compliances back to exporting NPPOs?

The kinds of messages that can be sent via the hub are largely independent of the hub design. The ePhyto Steering Group recommend that the initial design and use of the hub should kept very simple. This will:

a. keep the development and operating costs low
b. maximise reliable performance
c. make it easier for contracting parties to understand and use

At a later stage, more functionality could be added to the hub if the countries using it agree.

9. How are consignments in transit to be handled?

Electronic phytosanitary certificates are exchanged directly between the NPPO of the exporting country and the NPPO of the importing country. Therefore these electronic phytosanitary certificates will not accompany the consignment when it is in transit through another country, which may be the case with paper certificates. If a transit country has a legal requirement for a phytosanitary certificate being presented with the consignment in transit, an additional phytosanitary certificate, either paper or electronic, could be issued addressed to the NPPO of the country of transit.

10. How does electronic phytosanitary certification interface with a trade single window?

The interface with a trade single window is dependent on how each contracting party sets up its national systems for trade single window and for receiving and processing electronic certificates that come either through the hub or direct from trading partners.

Most trade single windows are focused on providing a single place for delivery and receipt of commercial consignment information. They are designed to make the interaction between industry and government more efficient. However, electronic phytosanitary certification is predominantly a government to government communication – the provision of an official assurance from one NPPO to another.

The NPPO needs to have a system which can receive, process, and store ePhyto’s. This does not necessarily have to be included within a trade single window system. It would be sensible though to have a strong link to it. For example the commercial consignment
information provided by an importer to the government through the trade single window should, where relevant, include reference to a phytosanitary certificate number. A link from the TSW to the NPPO’s ePhyto receiving system would allow the phytosanitary certificate number in TSW information to be validated against the information in the ePhyto receiving system.

11. How will transmission of ePhytos through the hub be kept secure?
An ePhyto will be transmitted either through a transmission protocol named HTTPS or through a transmission protocol named Secure SMTP. Both transmission protocols ensure that the message cannot be read during the transmission (because the message is encrypted during the transmission).

12. What requirements would have to be met prior to engaging with the hub?
The importing or exporting NPPO would need to have an electronic system to create and send ePhytos to the hub, and to receive ePhytos from the hub.

13. Will there be comprehensive security testing of the hub before we start using it?
Yes, security testing will be an important part of the pre-deployment testing.

14. What will it cost to build a hub?
A costing was estimated in the feasibility study presented to CPM in 2014. This study estimated the cost at between US$200 – 500,000.

The IPPC ePhyto Steering Group has developed a technical specification for creating and managing an ePhyto hub. This technical specification is being used to request price estimates from potential vendors to provide a price estimate for building and also for hosting and servicing the hub.

15. Should the importer pay the cost of transmission or the exporter?
In many countries, the exporter pays the cost of obtaining phytosanitary certificates for their export consignments. This includes the cost of phytosanitary inspection and certificate production.

However in some countries the government pays and provides this as a service to the exporter.

Ultimately it is up to each country to determine who will pay the cost associated with ePhyto and to establish appropriate legislation to support their decisions.
16. **How can contracting parties recover the cost of producing and transmitting certificates?**

This will be dependent on the legislative arrangements in place within each country. Some contracting parties may need to establish new legislation or regulation to facilitate cost recovery for production and transmission of certificates.

17. **What cost recovery issues are there for IPPC?**

Some funds will be required to:

i. Maintain harmonised terms and codes as per ISPM12 Appendix 1.
ii. Pay for on-going costs of hosting and running the hub
iii. Pay for any future developments

These costs should be recovered from those countries benefitting from the service.

This could be done by establishing prepaid accounts for each NPPO and debiting from the account of an exporting or importing NPPO $0.xx every time a certificate is received at the hub. Or, a fixed monthly or annual fee could be set for users of the hub. An annual fee could be graduated according to broad categories of volume of use. An option could be that countries sending less than 5,000 certificates per year could be granted free access.

The most appropriate mechanism will not be able to be determined until the form of the necessary contractual relationships is more apparent. This may be dependent on which provider or providers are selected. After a decision is made to proceed with the hub, the ePhyto Steering Group and Secretariat can work with potential providers and FAO to explore viable options. Recommendations on this and other business rules will be made to the Bureau.

18. **How can it be ensured that electronic transmission and the hub are not used as a technical barrier to trade?**

Alternative systems for exchange of certification data will continue to exist, e.g paper/physical, point to point electronic.

Establishing a requirement that certification could only occur via the ePhyto Hub mechanism would be counter to WTO rules and could be considered a trade barrier. IPPC and WTO disputes mechanisms would be available to contracting parties.