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REPORT

ePhyto Industry Advisory Group (IAG), ePhyto Steering Group (ESG) meeting with Industry Representatives

**Virtual
June 2020**

IPPC Secretariat

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1. Background

- [1] The purpose of this report is to provide information on the recent virtual meetings that have been held between the leading participants in the IPPC ePhyto Solution (the ePhyto Steering Group, the ePhyto Industry Advisory Group (IAG) and IAG observers). The meetings consisted of general updates from participants as well as brainstorming sessions dedicated to discuss how to make the best use of any opportunity to take advantage of lessons learned from the Covid-19 pandemic to improve the ePhyto Solution to provide better service to all stakeholders. In addition, participants discussed ways to increase awareness of the opportunities to engage in safe and efficient trade with a goal towards paperless exchanges and integration with industry blockchain platforms.
- [2] The group, which included the IPPC Secretariat ePhyto team, discussed the adoption of the Solution in countries and the progress made with the Hub “Channel feature” as well as objectives for the future in relation to industry connections. IAG participants included the leaders of international NGOs representing the global grains, seeds, fresh fruits and vegetables, wood products and cotton industries. There were also observers on the call representing the Global Alliance on Trade Facilitation and the Wine Institute.
- [3] The meetings heard from some industry representatives about advancing the ePhyto industry case studies and other opportunities to promote the benefits of ePhyto particularly at this sensitive time.
- [4] The first meeting was held on 05 June 2020 and was opened by the new Deputy Director General (DDG), Beth Bechdol, in FAO. Two subsequent meetings were held to discuss the technical aspects behind the Hub channel connection and sustainable funding options for the Solution. The meetings had approximately 30 participants from the wide variety of industry groups (Appendix 2)

1.1 Welcome by the FAO DDG

- [5] Mr Jingyuan XIA, IPPC Secretary introduced the new DDG who opened the meeting by welcoming all participants. DDG Bechdol spoke about her background growing up on a farm that has been in her family for generations and emphasized her enthusiasm and commitment for agricultural innovation. She spoke of her excitement over the progress of the IPPC ePhyto Solution and noted how impressive the success of the project has been to date.
- [6] DDG Bechdol noted that Covid-19 has underscored the importance of the use of new technologies such as the IPPC ePhyto Solution and this is the chance to show the advantages of such a system to help mitigate the effects of Covid-19 for safe and efficient trade to deliver food in these times.
- [7] The DDG made a point to congratulate and note the recent developments and achievements of the Solution such as the EU TRACES system connecting to Hub via the Channel feature, Argentina and Chile going completely paperless for their trade of plants and plant products and the new eLearning for the Generic ePhyto System (GeNS) that had recently launched. She noted that many other great advancements and achievements were happening but she hoped this was just the beginning for the ePhyto Solution.
- [8] Lastly, the DDG mentioned how the ePhyto project is a great example for a complimentary partnership between Industry and Government and it’s great to see the developing relationship citing this meeting as a great example. As she brings a perspective of private sector to FAO, she sees the need for a creative and more dynamic way to partner with the private sector and she mentioned she is working on a new private sector partnership strategy for FAO to be adopted in

late 2020. Ms Bechdol emphasised that there is a clear willingness in the new FAO management for interagency partnerships and collaboration measures will be a big part of the future.

- [9] The IPPC Senior Advisor, Mr Craig FEDCHOCK, welcomed all participants to the meeting on behalf of the IPPC Secretariat.

1.2 Welcome by the ESG Chair

- [10] Mr Christian DELLIS, Chair of the ESG thanked everyone for taking the time to come on the calls. He emphasized the importance of our work in these extremely trying times but the Covid-19 pandemic has highlighted once again the importance of using electronic means to move forward as a new way of doing business.
- [11] Mr Dellis commented on some great milestones reached in the past couple of months, namely the volume of countries that are starting to come on board during the pandemic. He noted that before Covid-19, the US was exchanging with 13 countries via the ePhyto Hub and now the US is actively exchanging with 40 countries. He noted that this increase is largely due to the successful connection with the EU TRACES which brought the 26 member states onto the system.
- [12] He noted the importance of the work of industry case studies in helping to identify the challenges but also the benefits to keep promoting the Solution, specifically finding ways to quantify the benefits in terms of cost savings. Lastly, it was mentioned that the more industry groups we can work with, the better it is to get real time results on the benefits of ePhyto.

1.3 Welcome by the IAG Chair

- [13] Ms Alejandra DANIELSON, IAG Chair thanked the IPPC Secretariat and the ESG for inviting members of the IAG to be part of this conversation. The IAG works closely with the IPPC Secretariat, FAO, National Plant Protection Organizations (NPPOs) and industries in countries. They work on case studies and identifying interoperability in countries between Government and Industry groups.
- [14] She highlighted the critical importance of the ePhyto project and the fact that there is a broad representation on the IAG and the door is always open for more industries to join.

2. Meeting arrangements

2.1 Adoption of the agenda

- [15] The participants from the first meeting adopted the Agenda and agreed to have subsequent meetings to discuss technical and financial elements of the IPPC ePhyto Solution.

3. ePhyto regional perspectives and next steps moving forward

Report from Central and South America region

- [16] Mr Walter ALESSANDRINI (Ar) updated the participants on recent developments in his region. He mentioned even though Argentina and Chile are now fully paperless they are still working on improvements but overall it is going well.
- [17] South America have a lot of countries currently participating or wanting to come on board. Costa Rica is now exchanging in production certificates with Brazil and Mexico and overall there is a lot of participation in the region. GeNS is bringing on other countries like Guatemala who are advancing quickly through a number of training sessions (online). Training sessions have also taken place for Honduras.

- [18] In relation to the Hub Channel feature, work has already started with a company to test the industry connection to the Hub via the Channel. Walter noted that even though they are certain the technical solution can work, the ESG need to do more work on the scope and implementation of this new feature.

Report from the South West Pacific region

- [19] Mr Peter NEIMANIS (AU) updated the participants on the South West Pacific. At the moment they are learning a lot from the pilot countries; Sri Lanka, Samoa and Fiji who are all actively exchanging via the GeNS. The progress of introducing ePhyto in the region is slowing down due to other initiatives such as single windows.
- [20] There is however interest from other South West Pacific countries to join. Myanmar is testing the GeNS and should be online in the next month and countries in South East Asia such as Cambodia and Lao are also looking at how to join. Japan are still slow to join as they are a huge importer but not a big exporter. The Republic of Korea are actively testing and are starting to come online.

Report from the Africa region

- [21] Mr Josiah SYANDA (KE) updated the meeting participants on ongoing activity in Africa. He first noted his agreement to the comments made by the DDG regarding the importance of agricultural innovation. He mentioned that an ePhyto awareness raising for the COMESA region was postponed due to Covid-19 but hoped it may come up again later in the year.
- [22] Josiah gave a brief country update:
- Kenya are planning to go live in June / July 2020, starting mostly to the EU.
 - Zambia got their UAT set up. They needed clarification on the project that started with World Bank on whether GeNS or Hub.
 - Nigeria also have the UAT. There is restriction on travel but it will be good to get them training
 - Rwanda have their UAT set up
 - Uganda have completed the training for the super users. Few exports so wanted to start in the live environment. 05 June training online in Uganda. First NPPO Users and then Industry users will be trained. They are also developing their own system but this will be some time.
 - Request by Benin to come onboard and other questions from more countries to join.

Report from China

- [23] Ms Chen YING (Ch) updated the group that there has been no major updates on the ePhyto Solution in China yet. She mentioned that it is being escalated and becoming a higher priority for China so she is expecting some good news on the progress soon.

Report from the EU region

- [24] Mr Philippe LOOPUYT (Fr) updated the participants on the successful connection established between the Hub and the EU TRACES which is now operational for all imports into the EU. They have received 10,000 Phytosanitary certificates in the first 3 weeks, most of which are coming from the US, Argentina and Morocco.
- [25] They are having meetings with Chile, Costa Rica and New Zealand who are on good tracks to join with TRACES. Philippe encouraged other countries using ePhyto to begin sending their

certificates through TRACES. They still have not received any certificates from GeNS countries but they are welcome to begin sending.

[26] The EU will be ready to begin sending certificates in 3rd or 4th quarter of 2020.

Report from North America region

[27] Mr Christian DELLIS (US) updated participants on the status of the US who are now exchanging with 40 countries since the Covid-19 pandemic began. Most recently they began exchanging with the Republic of Korea, Mexico and Morocco. Mr Dellis noted that they are currently only receiving ePhytos from 14 countries but we are sending them to more than 40 countries.

[28] There are ongoing discussions with government and industry on how the connection to the industry systems will work but Christian highlighted that it will always be the choice of the commercial exporting party who (if anyone) gets a copy of the Phytosanitary certificate. The US hopes to start testing towards the end of this year.

4. IAG and industry members share observations on Covid-19 and the IPPC ePhyto Solution

[29] **International Grain Trade Coalition (IGTC).** Mr Gary MARTIN, IGTC President, commended the IPPC Secretariat and the work they have done along with the ESG. He particularly appreciated the reaching out and understanding the importance of the commercial aspect of the solution and how vital it is. He mentioned the IGTC takes a vested interest in the work of the IPPC Secretariat and why 100% adoption of ePhyto is critically important to provide the opportunity for interoperability. He also mentioned the importance of other sectors joining the IAG to broaden its reach. Lastly, he noted that the IGTC looks forward to developing and reviewing the new business process model.

[30] **National Alfalfa and Forage Association (NAFA)** – Ms Chelsea RUSSELL, Outreach & Communication Director at NAFA mentioned that they have not yet been able to participate in case studies but they are looking for some opportunities in countries. She noted that exporters do anticipate cost savings with the adoption of the ePhyto Solution.

[31] **International Seed Federation (ISF).** Ms Rose SOUZA RICHARDS, Seed Health Manager at ISF, mentioned that the wholesale adoption of a fully functioning ePhyto solution will be a great benefit to allow the movement of seeds. Some case studies have been completed but the ISF want more seed members to join the studies to get a clearly picture of the benefits. A current problem facing industry is getting the paper shared so ePhyto is proving more important for solving these types of issues.

[32] **Freshfel Europe – European fresh fruit and vegetables chain.** – Ms Nelli HAJDU, Director, Trade Policy & Business Development at Freshfel noted a new momentum for ecertification. The fruit and vegetable sector are coming to Freshfel looking for to move to electronic means going forward. She noted that previously it was difficult to get companies to contribute in case studies but now more companies are interested in joining due to Covid-19.

[33] **International Cotton Advisory Committee (ICAC).** Mr Peter WAKEFIELD, Managing Director at Wakefield Inspection Services, noted case studies are an issue for the cotton sector as they need both origin and destination to complete the studies but this is an issue for them. He mentioned that more work is needed to get the message through to lower level employees that they don't need original paper.

- [34] **Union Fleurs (International Flower Trade Association).** Ms Sylvie MAMIAS the Secretary General, noted how Covid-19 has been extremely damaging to the flower industry and how there was a complete crash of the supply chain. As there was no demand for flowers in the world it was a domino effect back to countries of production. African and South American countries are still dealing with the devastation of having no trade. Lastly, she noted ePhyto is part of the trade facilitation going forward and the importance of getting more industries involved and more case studies going.
- [35] **International Wood Products Association (IWPA).** Ms Cindy SQUIRES, Executive Director at IWPA noted there is general support for the Solution but getting importer and exporter access to the data will speed things up and be beneficial for industry. Travel and verification issues have been a problem for at least 2 years and this is a longer term problem. He mentioned there certainly more interest than in the past and they are strongly encouraging the eCITES group to join.
- [36] **Global Alliance for Trade Facilitation (GATF).** Mr Philippe ISLER, Director of the GATF, gave some background on the Global Alliance and how they are donor funded by public/private sector. He mentioned their objective is to measure results and to work with the private sector to demonstrate that the time and cost is reduced. Morocco was their first project on ePhyto; they are getting some very interesting results and they are continuing to work with them to keep things moving. He also noted their interest to work with other countries to facilitate the implementation of ePhyto.
- [37] **Trade Lanes.** Mr Vijay HARRELL, Trade Lanes CEO, noted that ePhyto is the embodiment of a single window system and Trade Lanes wants to help drive the adoption of ePhyto.
- [38] **Global Share.** Mr Enrique SEMPE, Global Share COO, mentioned they are one of the first companies to test the Channel feature with Argentinian NPPO. They can read the xml file but they appreciate the opportunity for a more technical meeting to ask specific questions.
- [39] **Bolero.** Mr Andrew RAYMOND, Bolero CEO, shared that they have some more technical questions on recent shipments with ePhyto but they are looking forward to the work ahead.

UNICC next steps for integrating the channel

- [40] Mr Venkat VENKATESWARAN from the UNICC spoke about how the Hub Channel feature came about as a result from requests to join the Hub with single windows or multiple entity systems. It became more of a priority and focus when the connection was needed to join the EU member states to ePhyto through TRACES.
- [41] He explained the UNICC are reusing what they did for a single NPPO connection for the technical implementation which gives the option to forward the envelope to any number of recipients. They are simply enhancing the feature in the Hub to keep it secure and simple.
- [42] He noted the first API document has been developed but they are still updating it as the work ongoing, which is a benefit. They have been able to test forwarding and delegation of sending and receiving with TRACES so far.
- [43] In order to create industry connections, there will be several new releases in the Hub and the UNICC will complete the channel API document to outline how industry systems can implement it and go live.

5. Industry connection and sustainable funding

- [44] Following the initial meeting, the same group met on the 23 and 30 June 2020 to discuss technical aspects of the connecting industry systems to the ePhyto Hub using the Channel feature. The Questions and Answers section are reflected in Appendix 3 of this report.
- [45] Regarding the discussions of sustainable funding, the group felt that the IAG had all of the necessary expertise to deal with this issue so it was agreed that the IPPC and IGTC Secretariats would work on a proposal for the IAG to review and discuss.

Appendix 1 – Agenda

[46] **Note:** This is the agenda for the first meeting held on 05 June 2020. The subsequent meetings were simply to discuss technical questions and brainstorm on sustainable funding options.

	AGENDA ITEM	DOCUMENT NO.	PRESENTER
1	Opening Session	--	Chaired by Mr Jingyuan XIA (IPPC Secretary)
1.1	Opening address from FAO DDG-P		Ms Beth BECHDOL
1.2	Welcome address from IPPC ePhyto Steering Group Chairperson		Mr Christian DELLIS
1.3	Welcome address from IPPC Industry Advisory Group Chairperson		Ms. Alejandra DANIELSON-CASTILLO
2	Meeting Arrangements		Mr Christian DELLIS
2.1	Adoption of the Agenda	01_ESG_2020-03	
3	ePhyto Regional Perspectives, Impact of Covid-19 and Next Steps Moving Forward	--	ESG members
4	ePhyto Industry Perspectives, Observations and Anecdotal Reports of Impact on Covid-19 and ePhyto		IAG members
5	Brainstorming and Discussion		ESG/IAG
5.1	How to use what we've learned from the Covid-19 crisis to further develop and advance IPPC ePhyto	--	
5.2	Industry Integration with IPPC ePhyto – the Channel, Implementation Partnerships	--	
5.3	Communications and outreach of IPPC aPhyto	--	
6	Next Phase of IPPC ePhyto Development – Scope of Work for the Next Six Months of 2020		UNICC/ESG/IAG
7	Any Other Business	--	Mr DELLIS
8	Next Meeting	--	Mr DELLIS
9	Close of the Meeting	--	Mr DELLIS

Appendix 2– Participants List

ESG Attendees

Region / Role	Name	Email address
Africa Member	Mr Josiah Musili Syanda	jsyanda@kephis.org
Latin America and Caribbean Member	Mr Walter Fabián Alessandrini	walestan@senasa.gob.ar ;
Europe Member	Mr Philippe Loopuyt	Philippe.Loopuyt@ec.europa.eu
North America Member (ESG Chair)	Mr Christian B Dellis	christian.b.dellis@aphis.usda.gov
Pacific Member	Mr Peter Neimanis	Peter.neimanis@agriculture.gov.au
Asia Member	Ms Chen Ying	chenying_cy@customs.gov.cn
UNICC	Mr Gianluca Nuzzo	nuzzo@unicc.org
UNICC	Mr Venkatram Venkateswaran	venkat@unicc.org

IAG attendees

Industry	Name	Email address
IGTC (IAG Chair)	Ms Alejandra Danielson Castillo	adcastillo@grains.org ;
IGTC President	Mr Gary C. Martin	president@igtglobal.org
ICAC	Mr Peter Wakefield	peter@wiscontrol.com
Freshfel	Ms Nelli Hajdu	nelly@freshfel.org
ISF	Ms Rose Souza Richards	R.SouzaRichards@worldseed.org
IWPA	Ms Cindy Squires	cindy@iwpawood.org
Union Fleurs	Ms Sylvie Mamias	secgen@unionfleurs.org
NAFA	Ms Chelsea Russell	nafa@alfalfa.org

Digital technology providers

Industry	Name(s)	Email address(es)
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CargoX	Mr Peter Kern Mr Bojan Cekrlic Mr Vjeran Ortynski	p.kern@cargox.io b.cekrlic@cargox.io
Covantis	Mr Petya Sechanova (CEO) Mr Vincent Minna	petya.sechanova@covantis.io vincent.minna@covantis.io

Industry	Name(s)	Email address(es)
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Trade Lanes	Mr Vijay Harrell (CEO)	vijay@tradelanes.co
Trade Lens	Ms Annette Mueller Mr Nis Jespersen	annette.mueller@gtdsolution.com nis.jespersen@gtdsolution.com

Others

Role	Name	Email address
FAO, Deputy Director General	Ms Beth Bechdol	Beth.Bechdol@fao.org
IPPC Secretary	Mr Jingyuan Xia	Jingyuan.Xia@fao.org
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GATF	Ms Ines Knäpper	Ines.Knaepper@weforum.org
GATF	Ms Yuri Saito	Yuri.Saito@weforum.org

Appendix 3 - Industry channel questions & answers from the ESG

[47] How does the ESG see third party systems fit in to the system?

[48] The Hub is like a post office and each country has its own post box. What we will start doing is establishing a box for each industry system. The industry boxes will only be able to access phytosanitary certificates (PCs) that have been addressed to their individual system.

[49] Does the industry system need to be identified in the header of the PC? Will that be the copy that goes to the industry system?

[50] Yes, the industry system will be an additional field in the header (ePhyto envelope). When an exporting country also sends the ePhyto to an industry system(s), the company/companies will be in the header through a code. This is how the Hub can read it and subsequently place in the appropriate box.

[51] How do industry groups know what options to use to get a copy of the ePhyto?

[52] The channel consists of two options, one is delegation e.g. EU TRACES which one single entity on behalf of many countries, and the second is similar to being a cc on an email.

[53] The first option of delegation is envisioned as a government solution. For example, all PCs need to be received in that one system for instance, a single window system. The second option is about distributing it to different entities like the cc-ing to different entities, which don't automatically get access to every PC. When a national system is sending the ePhyto out, it can be marked with everyone to send it to. The industry system has to be registered in the Hub to receive a copy of the PC.

[54] How can a receiving company verify the digital signature?

[55] Digital signatures are still a topic of discussion for the ESG. The ePhyto exchange happens via X.509 certificates and most certificates do not have any specific signature.

[56] The exporter will advise the NPPO to send a copy of the ePhyto but how will they know that the importing company is registered? Is it a direct agreement between importer and exporter?

[57] The private company will connect their systems (i.e. register) to the official national system (Hub). In the US they intend to maintain and pull regularly a list of the registered industry systems. As exporters request PCs, they will be able to select which industry systems they want to share that PC with (even multiple systems). In designing ePhyto there is an assumption how the commercial platform will be working. A copy can be sent to this platform and the steps from a commercial aspect need to be determined by the industry system regarding how/who will then get access to the PC in the industry system.

[58] Signing up / registering to the Hub is confusing. Will companies need to sign up to the Hub before signing up to the commercial platform?

[59] More information on the registration will be forthcoming. The channel is for entities which have their own system and workflows and would like to receive these PCs electronically. It may be companies that are the actual exporters/importers, but it's more likely that it will be a company that deals with multiple exporters/importers for purposes beyond the phytosanitary certificate and just need the PC in their internal workflow (example: delivery service companies).

[60] Can one entity use multiple systems and/or switch systems? How does one platform with multiple entities work? How do you know which platform to send the PC to?

[61] As the exporter is applying for their ePhytos they can select multiple industry systems to send the PC (ePhyto) to. All of the connected channels can be pulled down so there is a list to choose from and the exporter can pick who they want to send it to. In order for those industry systems to be selected, they have to be registered with the Hub. The exporter needs to go to the National systems to get the PCs (as is already done) but the industry systems who can receive the copy are made available in a list to pick from for the exporting country.

[62] Guatemala is an example related to the generic system (GeNS). The exporter can log in to the GeNS and when it applies for a PC the system will display all connected parties registered to the Hub and they can choose in the system who to send it to (the NPPO plus verified industry systems).

[63] Companies are reluctant to be obliged to use several services and several connections. Platform to get PC on the behalf of company's user will be appreciated.

[64] The IPPC project is focused on activities that happen after a certificate is issued. These other precertification processes are up to each country to work with their corresponding industry. For example, in the U.S. they are talking with companies so that instead of entering their data directly in the US official IT system, they would prepare an application into their own company IT system and send it through a web service. Several other countries already have that capacity.

[65] Is it correct that if a company like BSM chooses to use the PULL mechanism, there is an assumption that there is a web-service to request a list of all available ePhytos to collect? Using those results we can then pull each waiting ePhyto looking for confirmation. Then if a company like BSM is the software provider for multiple registered recipients, can BSM make a single pull, using the one "BSM" certificate to download/collect ePhytos for all our customers.

[66] There is a web service to request all available ePhytos (within the mailbox of that company) and they can pull them all down or one at a time.

[67] If a load is sold during transport and the buyer uses a different system than the one that was selected. Can it be redirected to the system of the new buyer?

[68] In that case the solution is to issue a replacement certificate. As the exporter requests the replacement they would again have the option to pick with industry systems they want to share the certificate with. In the ePhyto world, the first ePhyto is sent a new "withdraw" message which would be used to update the status of a previously issued certificate.