

# How to incorporate national certification system into the ePhyto hub for safe trade facilitation:

Case of Cameroon electronic phytosanitary certificate system

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# PLAN OF PRESENTATION

- ❏ INTRODUCTION
  - ❏ STEPS OF EPHYTO EVOLUTION IN CAMEROON
  - ❏ CONCEPTUAL MODEL IN THE SYSTEM
  - ❏ WHAT IS THE IPPC EPHYTO SOLUTION?
  - ❏ MODELS AVAILABLE TO CAMEROON
  - ❏ REQUIREMENTS TO EXCHANGE CERTIFICATES
  - ❏ CONCLUSION
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# Introduction

- ❑ The Cameroon electronic phytosanitary certification started in the year 2007 when the Government wanted to improve the performance of the export and import system.
- ❑ The Doing Business report by the World Bank Group stated that the country was not attractive, due to lengthy, time consuming and costly administrative procedures.
- ❑ To reduce the time taken by an operator to go through different administrative services, the **single window for operations of the foreign trade** were established in the same building (Banks, Administrative services, Insurance, etc)
- ❑ Meanwhile, some of the procedures needed to be completed in the central services of various administrations, then, came the idea of using the advantages of the IT to fill the gaps between these Central Services and the border posts.
- ❑ The First Generation Single Window were developed and deployed.
- ❑ For the Ministry of Agriculture, the flagship to implement on the platform was the procedure to emit and receive the electronic phytosanitary Certificate(**ePhyto**).

## 2. Steps of ePhyto evolution in Cameroon

# AP  
VS  
Cert/CCT

Fin  
projet BM

GATF

2007

2010

2012-2016

2016-2018

2021-22

- ❑ Reforms of the Inspection services:
- ❑ *Creation of a One-Stop Shop for Foreign Trade Operations*
- ❑ *Physical building where operators can find all the services they need to obtain their Foreign Trade documents*

Choice of using new ICT to resolve constraints on the spatial distribution of Central Services and Operational Inspection Services located at maritime, airport and road borders

- ❑ Recruitment of an international consultant, studies, technical specifications, development, testing, and delivery of software: SIAT Version 1.0
- ❑ Provision of the first computers, training, Optic Fibre instalment

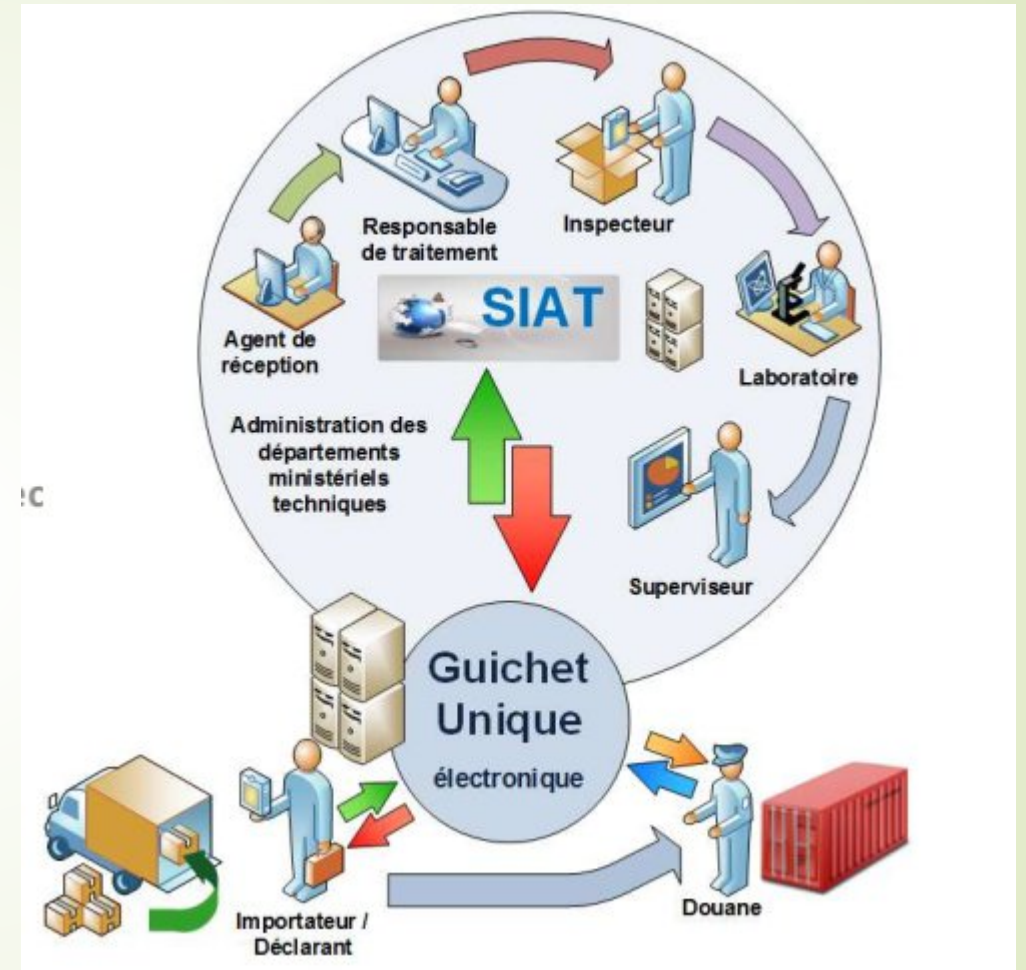
- ❑ Optimization and commissioning of the Phytosanitary Module at the Port of Douala, then at the Port of Kribi
- ❑ Pilot tests
- ❑ Production of Phytosanitary treatment attestations, loading reports, and phytosanitary certificates
- ❑ Paper documents continue to be produced

- ❑ *GATF-IPPC Initiative May 18, 2021*
- ❑ *GATF Formalities*
- ❑ *Mission for identification september-2021*
- ❑ *April 2022: Technical Assistance Mission 1 ePhyto export*
- ❑ *June 1, 2022: First ePhytos in production*
- ❑ *June-September 2022: Technical interactions for electronic signature*
- ❑ *September 2, 2022: Acceptance of ePhytos in the EU with electronic signature*
- ❑ *October 2022: Technical Assistance Mission 2: Plan for ePhyto import from January 2023*

### 3. Conceptual model in the system

In the eGUCE platform, there is a module dedicated to technical administrations called SIAT (Information System for Technical Administrations)

- In this module, they can :
  - recieve the applications submitted by operators
  - process them
  - Arrange an appointment for physical operations
  - Collect samples and submit to laboratories
  - Report the inspection results
  - Generate the data for the draft certificate
  - Pay the operations as needed





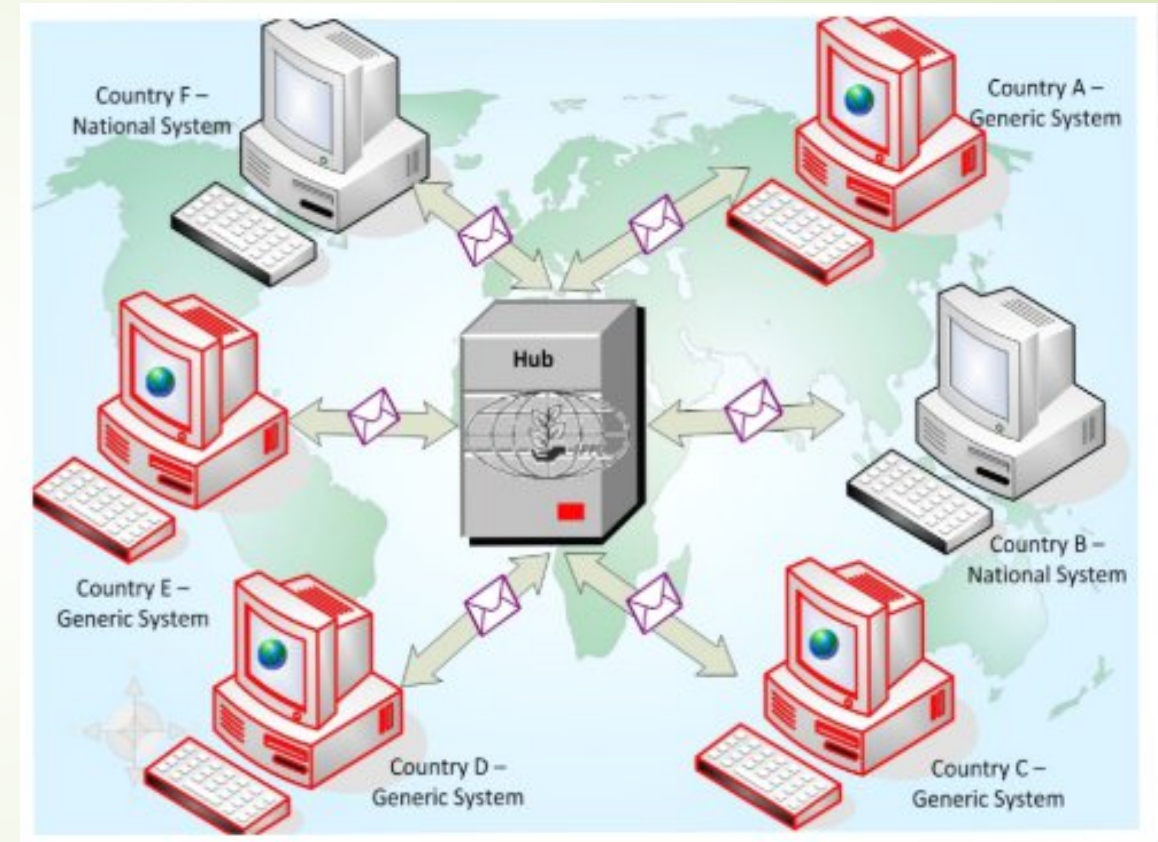
# From local phytos to ePhytos

- ❑ Based on this model, the SIAT module could produce Certificates based on the ISPM 12 (1.2):
  - “Phytosanitary certificates can be in paper form, or where it is accepted by the NPPO of the importing country, in electronic form.”
  - “Electronic phytosanitary certificates are the electronic equivalent of the wording and data of phytosanitary certificates in paper form, including the certifying statement, transmitted by authenticated and secure electronic means from the NPPO of the exporting country to the NPPO of the importing country. Electronic phytosanitary certification does not constitute text processing or other electronic generation of paper forms, which are then distributed non-electronically. Nor is it the transfer of an electronic version of the paper certificate (e.g. through e-mail).”
- ❑ But from **2018 to 2022**, the system was generating certificates that needed to be printed, signed and stamped like normal paper certificate. The system was not connected to any other.
- ❑ Then came the Ephyto HUB and the various models to choose between (GeNS, National System eGUCE or TRACE NT)

# 4. What is the IPPC ePhyto Solution?

The IPPC ePhyto Solution consists of 3 main elements, the Hub, the GeNS and Harmonization:

- **Hub:** no need for costly bilateral IT agreements and thus send and receive ePhytos from any other country also connected
  - **The GeNS (Generic ePhyto National System)** is a centralized web-based system to allow countries that do not have a national system to produce, send and receive ePhytos through the Hub. **no country is excluded of the digital exchange**
  - **Harmonization** of electronic phytosanitary certificates means that the structure and transmission of ePhytos follow a harmonized format through the use of standardized mapping, codes and lists (XML language)
- The IPPC ePhyto Solution makes trade safer, faster and cheaper



# 5. Why ePhyto?



Paper

*versus*



ePhyto



Signature, stamp can be falsified



Damaged



Lost



Handled by numerous parties



Costly re-issuance



Deterioration of commodities waiting for clearance



Problem of "original certificate" and copies



More problems with non-compliant documents than actual plant health issues



Very difficult to falsify



No deterioration



Bring with you as many as you want, accessible everywhere



Easy to circulate



Easy re-issuance



Faster clearance



No problem of obtaining "officially certified copies"



Less non-compliant documents thanks to harmonization



## 6. Models available to Cameroon

When the decision to join the Hub came in 2020, Cameroon was facing 3 models for exchanging its electronic phytosanitary certificates:

- ❑ Model 1: Web-based National System (eGUCE)
- ❑ Model 2: Using the Generic ePhyto National System (GeNS)
- ❑ Model 3: Regional Single Window of the EU to trade with the EU Member States (TRACE NT)

# 6.1. Model 1: Web-based National System (eGUCE)

## Pros

- Is the Government recognised Platform for all the administrations participating in the foreign trade
- Can handle more than the ePhyto (ie ePermit, Importation of registered Plant Protection Products, importation of registered fertilizers, ePayment, etc)
- Is used to collect and secure inspection fees
- Can improve the collaboration with other local border administrations (Customs, Forestry, Trade, etc)
- allowing authorities to customize workflows to match existing business processes
- Available dedicated help desk and support mechanisms ensures users can quickly resolve issues
- Local training is available to users, on demand and for free

## Cons

- Substantial upfront development, with ongoing maintenance : obligation fo users to pays for the system usage
- Implementation timeframes can be longer
- The system requires specialized IT personnel
- the responsibility for system security and compliance falls entirely on national authorities, requiring continuous vigilance and expertise

## 6.2. Model 2: Using the Generic ePhyto National System (GeNS)

### Pros

- ❑ Cheap, simple and straightforward solution for ePhytos emission and reception
- ❑ the IPPC Secretariat provides system infrastructure, maintenance, and technical support, taking on the burden of system development and updates
- ❑ The NPPO serves as the system administrator at the national level, focusing on operational aspects rather than technical maintenance
- ❑ United Nations International Calculation Center (UNICC) handles hosting and technical maintenance, providing enterprise-grade security and reliability

### Cons





- ❑ Is not designed to handle other procedures of the foreign trade (ePermit, traceability, etc)
- ❑ Not aligned with the national legal framework to use the single window for all foreign trade procedures
- ❑ Limited possibility to integrate pre-certification steps in the system
- ❑ Uncertainties for help desk and support mechanisms to ensure users can quickly resolve issues

## 6.3. Model 3: Regional Single Window of the EU to trade with the EU MS (TRACES NT)

### Pros

-  Easy to use for the trade with the EU member states
-  Plant, Plant products, Organic Products, etc
-  Free, stable, safe, well maintained by the EU Commission
-  Registration of Operators

### Cons

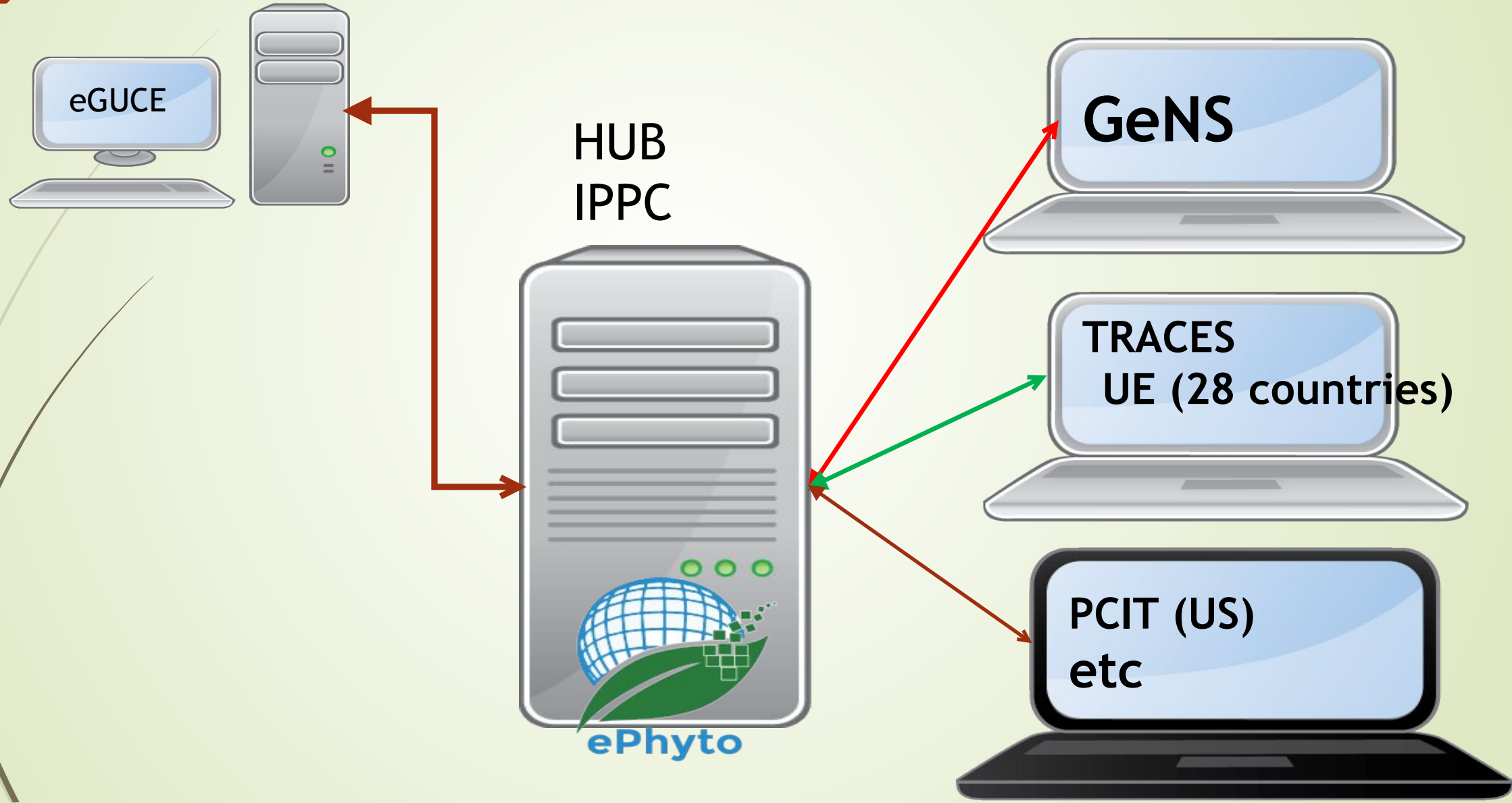
-  Not handling other national procedures
-  Uncertainties on the exchange of ePhytos with non EU countries
-  Not collecting certification revenues
-  Not aligned with the national legal framework to use the single window for all foreign trade procedures



## 6.4. The model chosen by Cameroon

- ❏ Based on the regulations in place governing the digitalization of foreign trace procedure, the exchange of ePhytos through the National System was adopted.
- ❏ This system tracks the inspection of plant and plant products and certifies compliance with plant health standards of importing countries, providing Cameroon with better security, reporting functions, and monitoring capabilities for exported commodities
- ❏ As of June 2022, ePhytos are automatically sent for all consignments exported from **Cameroon sea ports** to any trading partner currently utilizing the IPPC HUB, significantly streamlining the export process
- ❏ This model regrouped all the pros of having a national system. The same platform is used by 10 ministries, can interface with Customs system, is used to collect fees, generates statistics on the trade, etc

## 6.5. last milstones to ePhyto



## 6.5. Last milestones to ePhyto

- Based on the capacity of the system to generate certificates that were then printed locally, the GUCE team using the documentation provided by UNICC, started to develop the protocols for **interfacing** of the system with the **IPPC HUB** in 2021
- With the assistance IPPC and Global Alliance for Trade Facilitation, tests and troubleshooting were conducted and provide useful insights to the development team to improve the system
- Trials with different NPPOs were positive (Senegal-GeNS, EU-TRACES, US-PCIT,etc)
- After correction of all the issues from the tests, a roadmap were developed and implemented
- The first compliant ePhyto were produced the 1<sup>st</sup> june 2022
- The acceptance of signed ePhytos were accepted by TRACES NT (EU), from the 2<sup>nd</sup> September 2022
- Since then, the country is sending ePhytos to a growing number of countries
- As of date Cameroon has exchanged 15000 ePhytos and received

# SIAT PLATFORM

siat.guichetunique.cm/siat-ct-minader-web/pages/bo/outephyto/index.xhtml

**SIAT**  
Contrôle Technique MINADER

Ministère : MINADER  
Département : Direction de la Réglementation et du Contrôle de Qualité des Intrants et des Produits Agricoles

Utilisateur : CHARLS NYING  
Déconnexion  
Fr Eng

Numéro Dossier

Dossier Ephyto

Certificat Reçu

Certificat envoyé

Recherche +

Statistiques +

Suivi des dossiers +

Paramétrages +

### Dossier Ephyto

Numero Dossier	reference Siat	Emetteur	Pays de destination	Type de Fichier	
CTE047388	CT158073	232	Chine	CCT_CT_E	
CTE047870	CT158401	ADZOM	Portugal	CCT_CT_E	
CTE047753	CT158250	2NTTRANSIT	Belgique	CCT_CT_E	
CTE046662	CT157067	219	Etats-Unis d'Amérique	CCT_CT_E	
CTE046670	CT157074	219	Etats-Unis d'Amérique	CCT_CT_E	

5 (1 - 5 sur 14055)




https://siat.guichetunique.cm/siat-ct-minader-web/pages/bo/outephyto/index.xhtml#

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21° ENG FR 07:23 02/10/2025



# EXAMPLE OF EPHYTO

CERTIFICAT PHYTOSANITAIRE		REPUBLIQUE DU CAMEROUN Paix-Travail-Patrie	REPUBLIC OF CAMEROON Peace-Work-Fatherland
N° CTE116781		MINISTRE DE L'AGRICULTURE ET DU DEVELOPPEMENT RURAL	MINISTRY OF AGRICULTURE AND RURAL DEVELOPMENT
A PPPDLAP		DIRECTION DE LA REGLEMENTATION ET DU CONTROLE DE LA QUALITE DES INTRANTS ET DES PRODUITS AGRICILES	DEPARTMENT OF REGULATION AND QUALITY CONTROL OF INPUTS AND AGRICULTURAL PRODUCTS
Nom et adresse de l'exportateur <i>Name and address of exporter</i> TIANMU CAMEROUN INTER T.C LTD BONAPRISO DOUALA, DOUALA, Cameroun			
Nom et adresse du destinataire <i>Name and address of consignee</i> CWP ARCHITECTURAL 1011 CHEM DU LAC ECHO, PREVOST QC JOR 1T0 CANADA		Organisation de la protection des végétaux du Cameroun <i>Plants protection organization of Cameroon</i> A Organisation de la protection des végétaux de : <i>To Plants protection organization of :</i> Canada	
Moyen de transport déclaré <i>Declared means of transport</i> TRANSPORT MARITIME		Provenance <i>Origin</i> Cameroon	
Point d'entrée / <i>Point of entry</i> MONTREAL			
Marque des colis, nombre et nature des colis, nom des produits, nom botanique des produits <i>Distinguish marks, number and description of packages, name of product, botanical name of products</i> 28 COLIS SAPELLI (Entandrophragma cylindricum)			Quantité déclarée <i>Declared</i> VN : 64.871 M3 PB : 42166 KG
MSMU8422924/EU30225568 - MSMU6001870/EU30225569			
Il est certifié que les végétaux ou autres articles réglementés décrits ci-dessous ont été inspectés et/ou testés suivant les procédures officielles appropriées et estimés et exempt d'organismes de quarantaine comme spécifié par la partie contractante importatrice et qu'ils sont jugés conformes aux exigences phytosanitaires en vigueur de la partie contractante importatrice, y compris à celle concernant les organismes réglementés non de quarantaine. Les végétaux sont réputés pratiquement exempts d'autres organismes nuisibles. <i>This is to certify that the plant products or other regulated articles described above have been inspected and / or tested according to appropriate official procedure and are considered to be free from the quarantine pests specified by the importing contracting party and to confirm with the current phytosanitary requirements of the importing contracting party, including those for regulated non quarantine pests. They are deemed to be practically free from other pests.</i>			
Déclaration <i>Additional</i> Le bois marchand et les emballages sont de la même essence. Donc pas de nécessité de traitement à la NIMP15.			
Traitements effectués / <i>Treatment(s) carried out</i> Other pesticide		Lieu de délivrance / <i>Place of issue</i> DOUALA PORT	
Type of treatment Chemical Treatment	Fumigation / <i>Fumigation</i> <input type="checkbox"/> Désinfection / <i>Disinfection</i> <input type="checkbox"/>	Date / <i>Date</i> 25/09/2025	
Produit chimique (matière active) <i>Chemical product (Activate matter)</i> KOATSCIAGE B2 (IPBC 1,2% + Bifenthrine 0,3% + DCOIT 0,75% + Benzalkonium 0,7%)		Nom du fonctionnaire autorisé <i>Name of authorized officer</i> Emile AKONGO	
Durée et température <i>Duration and temperature</i> 01 HUR, NEANT Date de traitement : 19/09/2025		Signature / <i>Signature</i>	
Concentration <i>Concentration</i> 05% produit commercial + 95% eau			
Renseignements complémentaires / <i>Additional information</i> Traitement tous les 21 jours			

# 7. Requirements to exchange certificates

For a country to successfully implement a digitalization process, there are some basic requirements, namely:

- ❑ **Regulatory requirements:** For a country to make tangible progress on digitalization, there is a need to have a legal support (recognising the digital documents). A law on foreign trade was adopted and a decree of the Prime Minister recognise the Single Window for Foreign Trade as the unique platform of the country to implement the import and export procedures
- ❑ **Technical Requirements:** GUCE SIAT phytosanitary exchange procedure operates through sophisticated technical architecture based on XML messaging framework, consistent with the Appendix 1 of the ISPM 12 on Phytosanitary Certificates. Good IT personnel capable to understand the business rules and implement them on a seamless manner. Computer equipment, internet availability and stability are also factors that determine the adoption of the solution.
- ❑ **Human factor:** The success of a digitalization process heavily depend on the determination of the owner of the solution to make it work. If not, at the first difficulty, it will be abandoned. The users of the system are also determinant in the success of the process. Users should be trained, equipped, encouraged to use the system, encouraged to share any trouble of the system with the IT teams.

## 8. Conclusions

- Based on the ISPM 12 and its appendix complemented by the extensible technical documents elaborated by IPPC, Cameroon could build a ePhyto module capable of exchanging certificates with all the other models (GeNS, National Systems, etc)
- This is a clear indication that ePhyto is a well elaborated system that is flexible and scalable
- Countries wishing to join the ePhyto have multiple options depending on their economic situation, the IT expertise available in the country, the legal framework, the availability of skilled personnel to adopt and utilise the ePhyto, etc
- the benefits of the ePhyto is becoming clear for all the countries that started to implement it, and the global trend is now is the adoption for exchange of plant and plant products
- Countries that have not yet joined the trend are encouraged to do so. Those implementing it at a limited extent should generalize it to maximise these benefits



Thank you





# ACKNOWLEDGMENTS:

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- Mr WATO (eGUCE)
- Mr Emile AKONGO
- Mr TCHEUKAM Eli
- IPPC Secretariat

## USEFUL LINKS:

[https://food.ec.europa.eu/horizontal-topics/traces\\_en#the-benefits-of-traces](https://food.ec.europa.eu/horizontal-topics/traces_en#the-benefits-of-traces)

<https://siat.guichetunique.cm/>

<https://www.ippc.int/en/ephyto/>