HOW IT INNOVATION CAN SUPPORT AEO MUTUALLY RECOGNITION IN INTERNATIONAL TRADE OF FRUITS AND VEGETABLES

Prof.dr. Yao-Hua Tan Delft University of Technology (y.tan@tudelft.nl)

Vice-Chair UN Committee on Trade (Geneva) (2012-2014)

Scientific Coordinator EU projects CORE, CASSANDRA, ITAIDE

Program Director Master Customs and Supply Chain Compliance Rotterdam School of Management





EU Research Project CORE on e-Customs

- 78 partners
- Duration 2014-2018
- Total budget 49M euro
 - funded by the European Commission

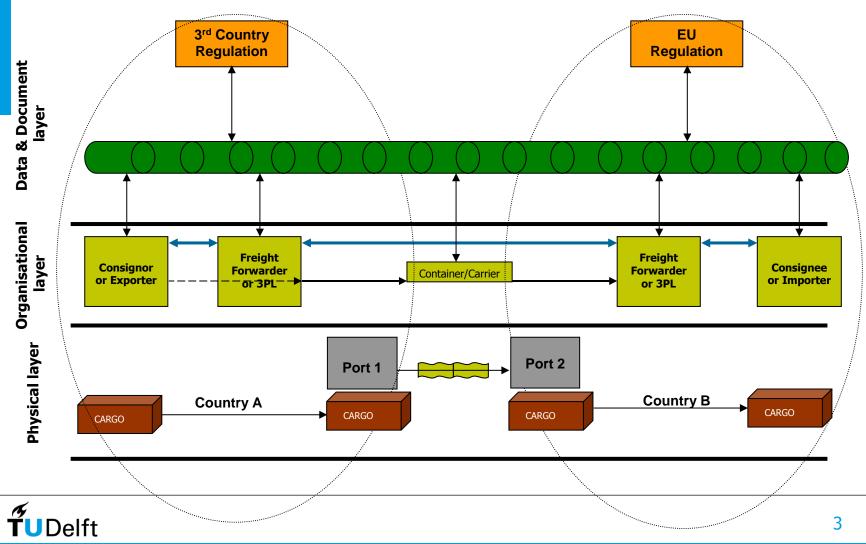


- 20 pilots on IT innovation for e-Customs and Int. Trade
- Trade lanes Air/Rail/Road/Sea between EU and China, US, Latin-America, Africa
- E.g. FloraHolland, Procter & Gamble, General Motors, Bosch Siemens Household (BSH), Airbus, MAERSK, DHL, IBM
- Customs Netherlands, UK, Belgium, Italy, Spain
- World Customs Organization (WCO), Interpol
- European Shippers Council (ESC)
- European Freight Forwarders Association (CLECAT)



Data Pipeline (Frank Heijmann, David Hesketh)

"Internet for Logistics" developed in EU research projects CORE, CASSANDRA



CORE FloraHolland Demo

Import of Roses from Kenia to Netherlands

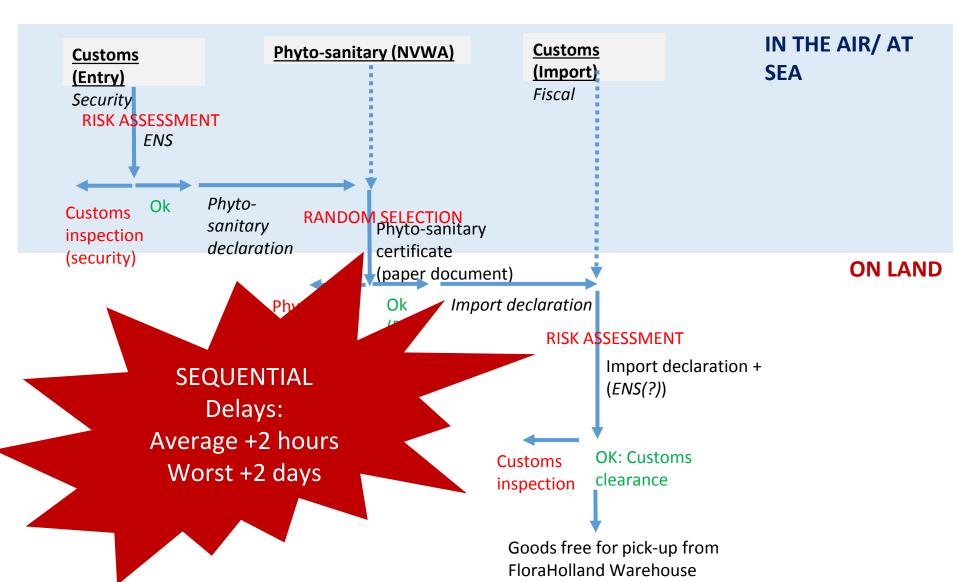
- Transport organised by FloraHolland from Kenia to Netherlands
 - **90** tons/year, **5** flights/day, pilot with Maersk Reefer Containers
- Distributed from the Netherlands to all over Europe
- Very active participation in CORE of Dutch Customs Grower's invoice is very reliable
- Kenyan Growers are members of FloraHolland
- Floraholland pays Kenyan Grower invoice within 1-2 days, collects it from buyer in EU
- Grower's Invoice is used by Dutch Customs to cross-validate accuracy of import declaration



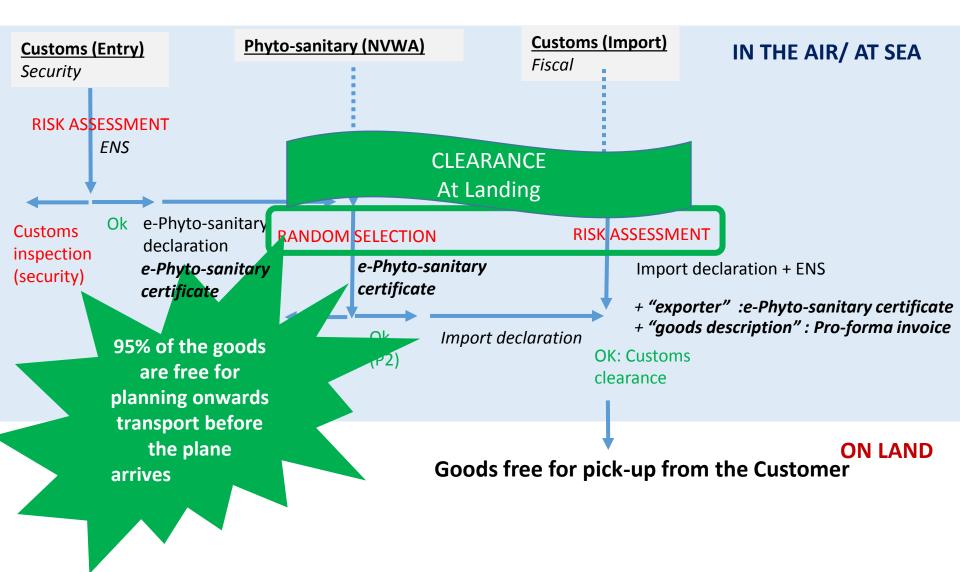




FloraHolland Air Demo (current)



FloraHolland Air Demo (improved)



AEO Aspects of FloraHolland demo

- FloraHolland is
 - Dutch Cooperative, operating world-wide
 - Providing services to 4800 members
 - Auctioning
 - Organizing Transport and Logistics
 - Pre-payment of grower's invoice
 - AEO certified
- But most of their 4800 members are not AEO
 - 800 members in Kenya and Ethiopia are not AEO
 - Kenyan Growers are **importers** in Netherlands
 - Due to auctioning of flowers in NL, growers use DDP incoterm
 - Import declaration is submitted by Dutch Customs broker on behalf of Kenyan grower
 - How can they qualify for benefits of AEO trade facilitation at NL import?



IT-enabled "Proxy AEO" Trade Facilitation

- Due to FloraHolland trusted network, Dutch customs can apply Clearance-at-Landing trade facilitation to trusted foreign companies that have no formal AEO status
 - Due to pro-forma invoice
 - Verified by FloraHolland
 - Even used by Dutch Customs to cross-validate import declaration
 - Kenyan Growers of FloraHolland become "Proxy AEO" by being member of trusted network of FloraHolland
- Data Pipeline IT innovation enables trade facilitation of Clearance-at-Landing
 - Enable Dutch Customs to collect additional documents to crossvalidate import declaration
 - Electronic pro-forma invoice from Kenyan grower
 - **Electronic** phyto certificate from Kenyan Plant Protection agency KEPHIS via Electronic Certificates System (**ECS**)



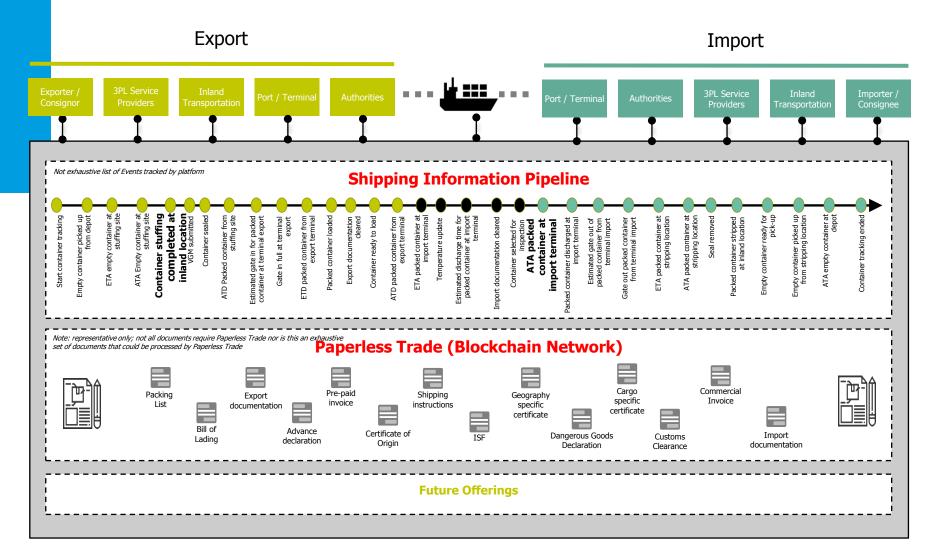
IT systems enabling Data Pipelines

- Give border inspections access to company data, by facilitating public-private information exchange
- **Existing ICT** (NL examples, but similar in many other countries)
 - Government Single Window initiatives
 - e.g. Digipoort (NL)
 - Electronic (!) Phyto Sanitary Declaration systems
 - E.g. CLIENT (NL), ECS (KEPHIS, Kenya)
 - Port Community Systems
 - e.g. Portbase (Haven Rotterdam), Cargonaut (Schiphol airport)
 - Logistics & Supply Chain Management software systems
 - e.g. Descartes, GT-Nexus, IBM etc
- ICT Innovations to further develop Data Pipelines:
 - Blockchain
 - Data Analytics (EU project PROFILE 2018-2021)



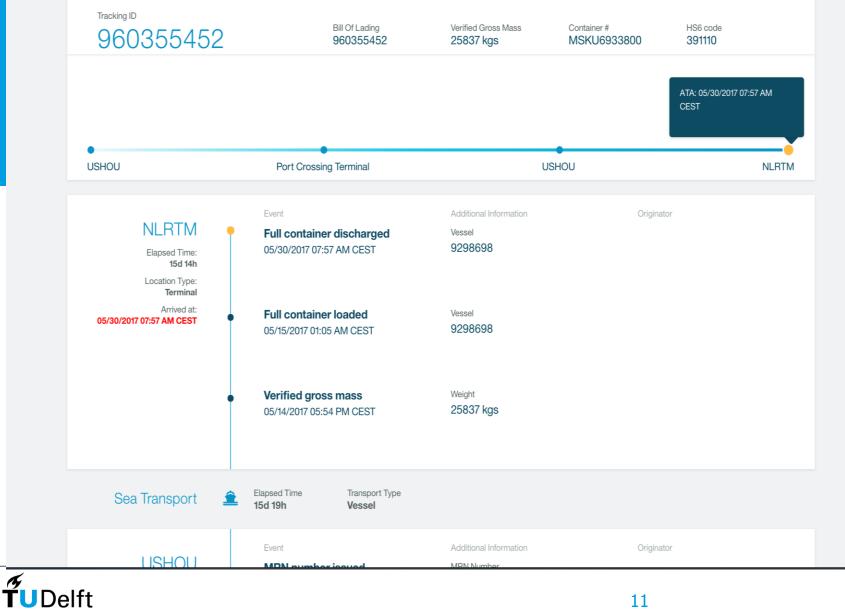
Global Trade Digitization (GTD) developed by MAERSK and IBM in CORE

Tested in CORE on more than 100 thousand containers



The GTD platform is currently offered pursuant to the terms of a collaboration agreement between IBM and MAERSK Maersk. The establishment of the Joint Venture remains subject to regulatory approvals. None of the information provided in this document should be construed in any way as a representation or undertaking with 10 regard to the position to be adopted by Maersk or IBM.

GTD Shipping Information Pipeline



11

GTD Paperless Trade Dashboard

<u>GTD</u> Paperless Trade					C) Sign Out
Exporter test-exporter-org Forwarder Damco	^{Order #} ref-2017/07/21	Customer Fresh Fruit	Exporter test-exporter-org	⊗ Authoriz	ze
Commercial Invoice Packing List COO/EUR.1 Phyto Export License	Commercial Invoice	7			20

ROTTERDAM SCHOOL OF MANAGEMENT ERASMUS UNIVERSITY *http://www.rsm.nl/customs*

EXECUTIVE MASTER



EXECUTIVE MASTER IN CUSTOMS AND SUPPLY CHAIN COMPLIANCE



Three Pillar Approach

1. Customs Regulations 2. Supply Chain Management and Logistics 3. Information and Compliance

Integration topic: risk management and being 'in control'

Integration topic: sourcing and procurement, social corporate responsibility in the supply chain

Integration topic: EU legacy systems and modernization of the customs code



Further Info

 Presentation TEDxBinnenhof: http://tedxbinnenhof.com/yao-hua-tan-talk/

Research projects funded by the European Commission:

• **CORE** (2014-2018, 49M euro) http://www.coreproject.eu/

• **CASSANDRA** (2010-2014, 22M euro) http://www.cassandra-project.eu/

• **ITAIDE** (2006-2010, 12M euro)



Yao-Hua Tan Niels Bjørn-Andersen Stefan Klein Boriana Rukanova *Editors*

Accelerating Global Supply Chains with IT-Innovation

ITAIDE Tools and Methods

D Springer



