1st December 2021

DIGITALISING LOGISTICS PROCESSES IN THE ADRIATIC SEA: THE FINDINGS OF THE DIGLOGS PROJECT

"Strategic drivers for the electronic exchange of information in ports"

Richard Morton
Secretary General, I

"A Community of Communities"

50 Members operating in over 50 Countries

Members Operating in excess of 500 Sea Air Ports, Inland terminals & border crossings

Seaports, Airports, PCS Operators, Single Window Operators

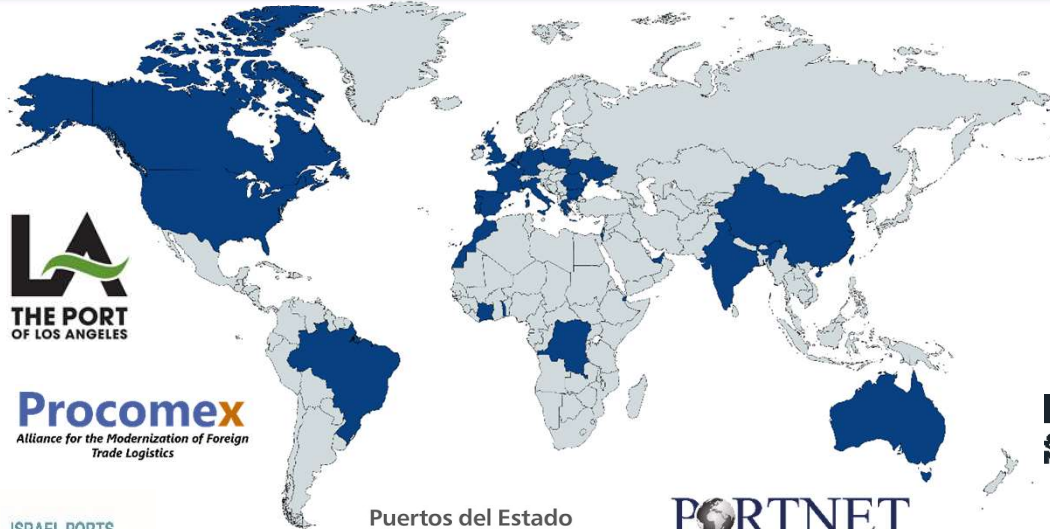Over 50bn electronic exchanges per annum and 1.5m+ users

Covering 500m+ TEUS 20...

IPCSA
International Port
Community Systems
Association

IPCSA Representation, Collaborations and working relationships
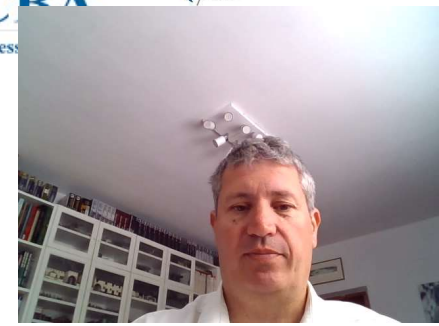
Strategic drivers for the electronic exchange of information in ports

- WTO Trade Facilitation Agreement
- IMO Revised FAL Convention
  - 2024 Mandatory electronic reporting of FAL forms in all ports globally
- European Maritime Single Window (EU)
- Electronic Freight Transport Information
- COVID-19

Digitalisation in the Context of Maritime Supply Chain "Data Requirements"

- Information and process flows
  - Operational cargo movement
  - Regulatory requirements
- Business Processes
- Automation of physical assets & infrast
- Technologies
- Building Resilience to mitigate risks

Standards Putting the Jigsaw together

Data

Processes

Regulatory Acceptance

Standards & Interoperability

SUMMARY OF IPCSA INVOLVEMENT

- Member of the IMO Expert Group on Data Harmonisation
- Most members are experts at UNCEFACT
- Supporting the work of ICAO and UNECE on interoperability standards
- Member of WCO Data Model Working Group
- Member of the WCO Private Sector Working Group
- Liaison at ISO for TC158 and one other TC
- Part of EU Digital Transport and Logistic Form
- Member of EU Expert group on European Maritime Single Window Environment
- Supporting the WEF Global Supply System Dashboard
- ICC Digital Standards Initiative Board member

GLOBAL MARITIME STANDARDS – Simple but complex

Organisation	Maritime Reference Model	Data Model	EDI		
			EDIFACT	XML - API	JSON-API
IMO INTERNATIONAL MARITIME ORGANIZATION	✓	N/A	N/A	N/A	N/A
UNECE UN/CEFACT	N/A	✓ Multi-model Transport	✓	✓	✓
ISO	N/A	✓ TC/8	✗	✓	✓
WORLD CUSTOMS ORGANIZATION ORGANISATION MONDIALE DES DOUANES	N/A	✓ WCO Data Model	✓	✓	✗
dcsa	N/A	✓ Reference to UNECE UN/CEFACT	✗	✓	✓
IALA / IHO International Hydrographic Organization	N/A	✓ S-100 / S-200	TECHNICAL NAVIGATION STANDARDS		
PROTECT	N/A	✓ Reference to UNECE UN/CEFACT	✓	✓	
S M D G	N/A	✓ Reference to UNECE UN/CEFACT	✓	✗	

Note: This is a visual representation and precise details should be requested from each of the stand

IPCSA

"International Chamber of Commerce - Digital Standards Initiative"

Lack of coherent standards for developers, executives and policymakers.

Legal uncertainty regarding the acceptance of digital trade documentation.

Platform rulebooks that hinder cross-platform title document exchange and utilisation.

Unclear requirements for foundational trade standards.

Insufficient standards to simplify blockchain and non-blockchain based integration.

"The ICC Digital Standards Initiative is establishing a globally harmonised trade environment to address these challenges and bridge digital standard gaps"

https://www.dsi.iccwbo.org/

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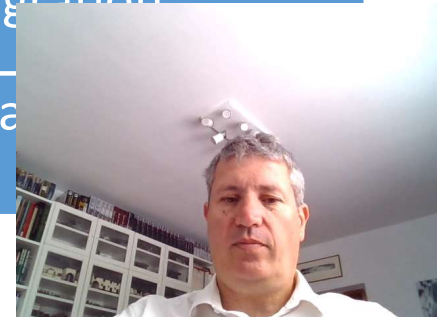
PROTECT

- Created in the 1990's to develop messages for Port Authorities by Port Authorities
- Integrated into IPCSA 2021 and undergoing a reset
- Leading EU Ports and Harbuormaster departments and PCS as members
- Standards are developed by PROTECT but published through UNCEFACT. PROTECT supports Maintenance and Message implementation guides
- Created, in EDIFACT, the:
  - IFTDGN (International Freight Transport Dangerous Goods Note (Undergoing revision through UNCEFACT Project at current time)
  - WASDIS (Waste Disposal message)
  - BERMAN (Berth Management Message)
- Current Reset of PROTECT
  - Update existing messages for multiple formats
  - Support Port Call Optimisation efforts
  - Provide an expert group to provide practical support to ports who are at the fi[r] digitalisation

"The Challenges of Standards"

- **Implementation**
  - ➤ Organisations adapt standards so have to manage non-standard standards
- **Maintenance**
  - ➤ Maintenance is a challenge as regulations change e.g Verified Gross Mass
- **Relevance and Reengineering**
  - ➤ Is what we do today relevant for tomorrow
- **"The Future is global data sharing"**

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LOGISTICS VISIBILITY

- Formed in October 2018

- ALIBABA, LOGINK and IPCSA agreed to promote the construction of globally intelligent logistics, to enable global package delivery goals of 72 hours can be achieved.

LOGISTICS VISIBILITY TASK FORCE
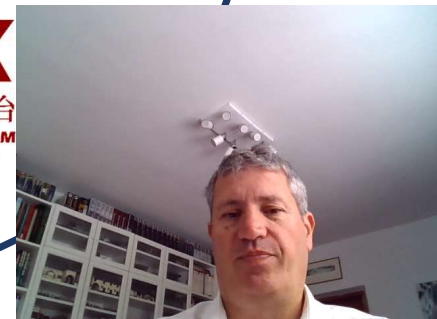
Electronic Exchange of Information in Ports

Network of Trusted Networks, Pipelines, Resilience, Technology advancements & Intelligence, Data Models

2 0 2 0 +

Pandemic helps creates global acceptance

Evolution of Data Exchange Platforms & Single Window. Standards Harmonisation & Technology

T o 2 0 2 0

PCS developed outside Europe. WTO TFA / IMO

Development of International Standards EDI messaging, Authentication

T o 2 0 0 0

Growth of PCS in Europe

Focus on Collaboration Common standards at local level

1 9 7 0 s

PCS Eme Europe

Differences between PCS, Maritime Single Window, Customs Single Window and National Single Window

In general we can see some of the differences

Port Community Systems

- Focuses, generally, on Cargo and matching logistics flows with administrational flows and B2B, B2G and G2B processes

Maritime / Port Single Window

- Focus is on Port Regulatory requirements for entry and exit of vessels so B2G, G2B and G2G for Maritime / Port requirements including IMO FAL

Customs Single Window

- Focus on Customs requirements B2G and G2G

National Single Window

- Collaborative environment bringing toget... administrations to ensure traders only ha... information only once for cross border tra... – see Rec 33, 34, 35,36 and also the assoc... documents of UNCEFACT) Focus is B2G, G...

Key Principles

DO NOT LET TECHNOLOGY drive the processes these should be driven by the Business.

Consider the right technology using the right data not the most visible unless it is appropriate
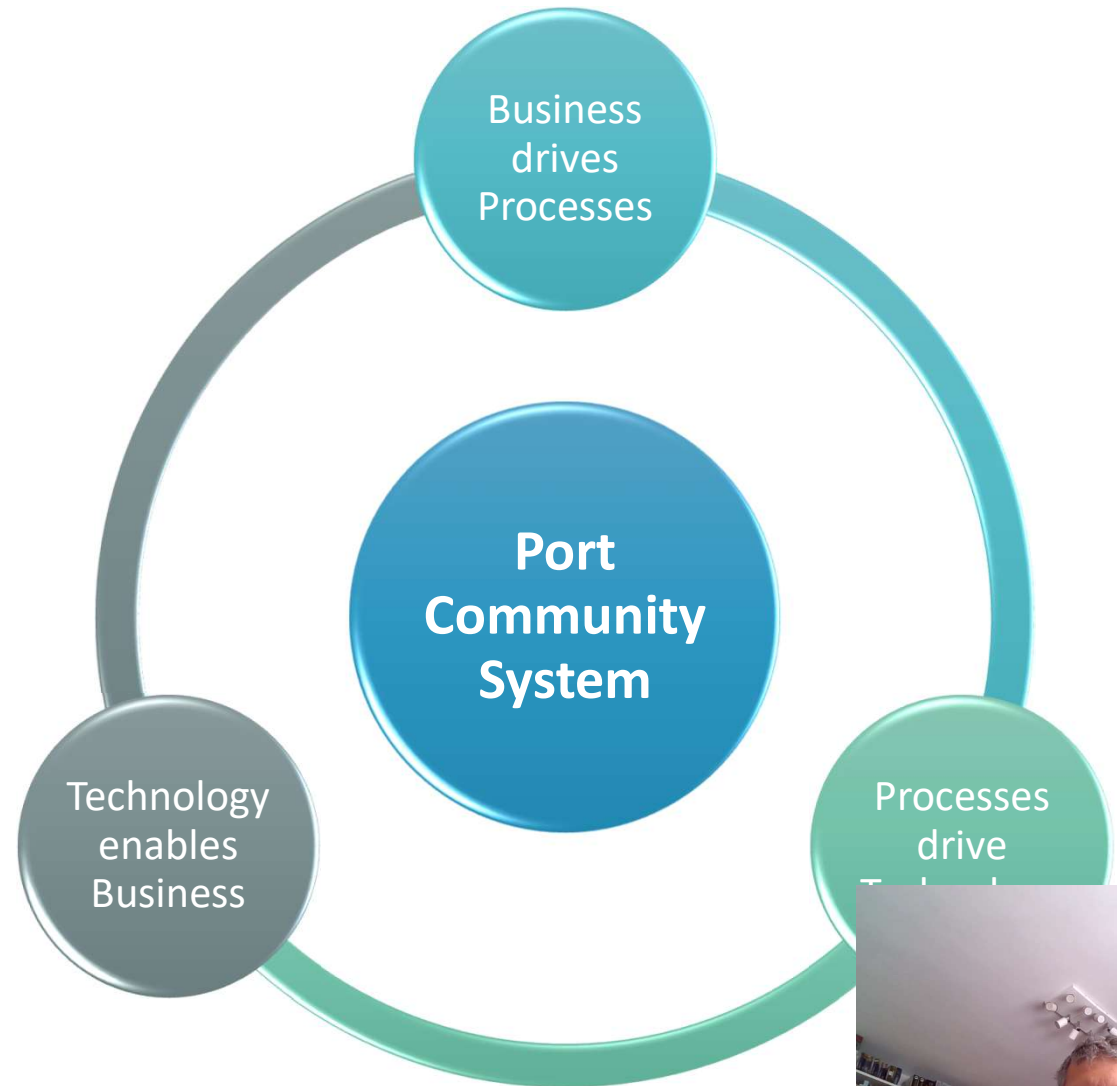
Business drives Processes

Port Community System

Technology enables Business

Processes drive

NETWORK OF TRUSTED NETWORKS | Connecting and sharing data globally between ports and cross border

Pilot Phase until Mid 2023

"Facilitate a neutral, global, scalable and collaborative solution among PCS and Single Windows based initially on Track & Trace APIs, facilitated by IPCSA. To share and exchange data Port to Port and Cross Border and to simplify the associated administrative and technical solutions"

IPCSA Members as a whole operate in over 50 Sea and Air Ports in over 50 countries.

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Principles

Governance Platform

Global Data Standards

Electronic Fee Negotiation

Encrypted Data

Allows for different business models

Low cost to Platforms and thus end users

Neutral & Not for Profit

Structured Contractual Flows

Digital Handshake

User Services & Platform Maintenance

Standard Platform APIs

Local Authentication

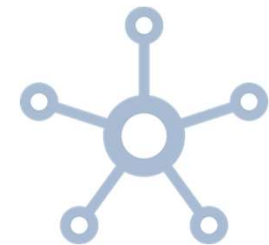"Facilitate a neutral, global, scalable and collaborative solution among PCS and Single Windows based initially on Track & Trace APIs, facilitated by IPCSA. To share and exchange data Port to P and Cross Border and to simplify the associated administrative a technical solutions"

Cross Border and Port to Port Exchange

NETWORK OF TRUSTED NETWORKS | Connecting and sharing data globally between ports and cross border

IPCSA considered what we know and use everyday……

Catalogue of Standards + **Choice of Ports & Services** + **Encrypted Exchange** + **Port Community Systems**

……adapted them to allow for

Port to Port and Cross Border Exchange of Information between platforms for the benefit of their users

IPCSA International Port Community Systems Association

NETWORK OF TRUSTED NETWORKS | Connecting and sharing data globally between ports and cross border

Initial API Catalogue

Portcall

Cargo Status

BIC Code

UN Locode

ISPS Code
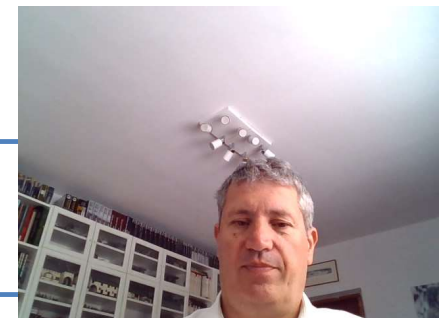
Current Participants cover
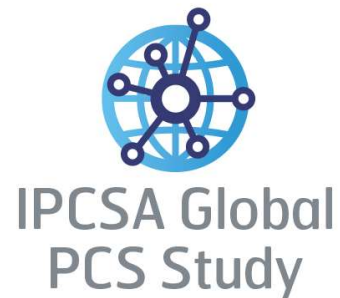
16 Countries

43 Seaports

10 Airports

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To come……More APIs including Air Cargo data and Participants
https://notn.ipcsa.international

IPCSA FOCUS 2021/2022

IPCSA Global PCS Study

NETWORK OF TRUSTED NETWORKS | Connecting and sharing data globally between ports and cross border

PROTECT

- **PCS of the Future**
- **Ports and Customs**

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THANK YOU

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https://ipcsa.inter

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