DAKOSY

Paperless Port with DAKOSY

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Agenda

1. DAKOSY

- Company profile
- Port Community System (PCS)

2. Integrated platforms

- 3. Development of new services examples
 - EMP 4.0
 - TRUCKGATE

4. Conclusion



Company profile

Facts and figures

Management Board: Dieter Spark, Ulrich Wrage

Employees: 180 employees

Capital: 1.53 mil. Euro

Founded: 1982

Shareholders: Seaport Industry of

Hamburg

Turnover 2017: 30 mil. Euro

Service times: 24/7

Locations: Hamburg (head office),

Bochum, Frankfurt and

Freiburg

Subsidiary: CargoSoft Bremen,

80 employees

Shareholder structure



Productlines



Cargo Communication



Customs



Logistics



DAKOSY – Port Community System Hamburg

Single Window, integrating the supply chain

























> 2,500 Companies



Port Community System Airport: FAIR@Link-Plattform



















Airport Operation System

FAIR@Link Collaboration Cloud







Forwarder



Declarant



Truck



Handling agent



Airline



Airport



Cargo Community Systems



~15 to 20 of the world's largest seaports have a PCS

9 out of 10 of the largest seaports in the EU have a PCS,

7 of them state-owned / partially state-owned / under governmental control

e – Quote Bill of Lading B/L worldwide ~ 55 %

Germany > 90 %



6 - 8 out of 20 of the world's largest cargo airports have a CCS (HKG, SGP, DXB, AMS, CDG, FRA)

EU Schiphol - Cargonaut, partially state-owned

Paris – CIN, partially state-owned

Frankfurt – FAIR@Link, private sector Hamburg – FAIR@Link, private sector

under Brusselsconstruction Switzerland

o e – Quote AirWayBill worldwide approx. 50 % (IATA)

Frankfurt approx. 30 % (DVZ)



International Port Community Systems Association

- Formed in 2011 by 6 leading European PCS
- 45 members operating in 41 Countries
- More than 1 million user within our members around the world
- Estimated 20 bn + electronic messages a year (20m a day)
- Members currently handle the exchange of information
 - over 250 air and sea ports,
 - over 500m TEU and 8bn tonnes of cargo
 - Up to 50% world maritime trade going through members systems
- 5 Regions matching those of UN Regional Commissions
- IPCSA membership is open to:
 - ✓ Air and Sea Port Community System Operators
 - ✓ Air and Sea Port Authorities
 - ✓ Single Window Operators
 - ✓ International and Regional Organisations

The Single Window Principle

UN Recommendation No 33 (2005)

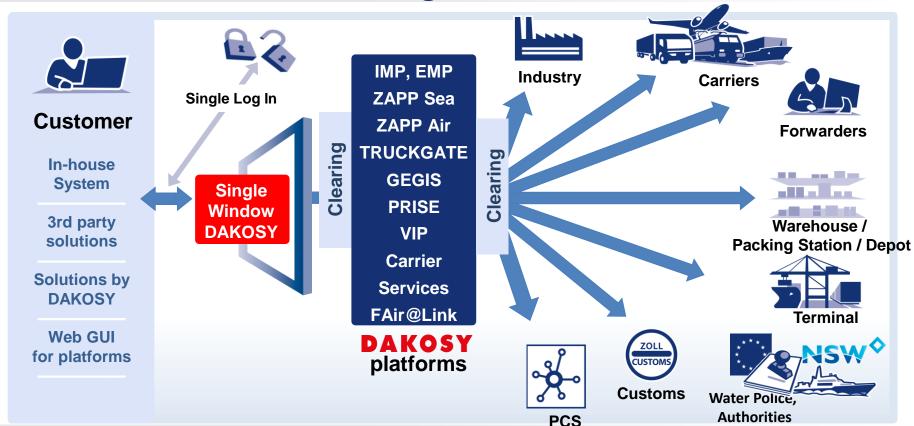
> "... a facility that allows parties involved in trade and transport to lodge standardized information and documents with a single entry point to fulfil all import, export and transit-related regulatory requirements. If information is electronic, then individual data elements should only be submitted once.,,

A Port Community System is a very special kind of Single Window, it...

- > .. is a neutral and open electronic platform enabling intelligent and secure exchange of information between public and private stakeholders in order to improve the competitive position of the sea and air ports' communities;
- > ...optimises, manages and automates port and logistics efficient processes
 through a single submission of data and connecting transport and logistics chains.
 (Source: http://ipcsa.international/pcs)



How to connect to the Single Window@DAKOSY





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Single Window – Export Management Platform



Carriers

Booking, BL, Dangerous Goods, Schedule, Manifest, Load List, Transport Order, Status, Invoice



Forwarders/ Exporters Booking, BL, Schedule, Customs Declaration, Transport Order, Port Order, Status, Invoice

BL, Status, Avis



Consignees



Terminals
Container Freight Stations

Vessel/Cargo Information, Port Order, GateIn/Out, Dangerous Goods, Status, Invoice, Packing Order



Transport Order, Dangerous Goods Declaration, Status, Invoice





Other PCS



German Customs EU Customs, US + Canadian Customs



ZAPP. ECS.

AMS, ACI,

Advanced Filing



Authorities

National Single Window, Port Authority, Statistical Bureau of Research, Office for Labour Protection, Environment Authority, Hamburg Port Health Center, Water Police, Fire Brigade





ZAPP – Sea and NSW Customs

Co-operating Single Windows: ZAPP(private) and ATLAS (public) **Export Customs office** Announcement (Step 1) 1. Declaration for Export = MRN **Exporter** 11. Confirmation of Export 2. Order and MRN **Monitoring (Step 2) Forwarder** 5. Presentation to Customs 3. HDS and MRN 6. Data of Declaration for Export 8. Permission (Z-No.) 7. Qualification 8. Permission for Export ZAPP **DAKOSY** 10. Confirmation of Exit 12. Close 4. Gate-In 8. Permission (Z-No.) 9. Shipped 8. Permission (Z-No.) **Terminal** Carrier **Exit Customs office** No shipment without being registered (=Z-Number)



Single Window – Import Message Platform



Forwarders



Status Customs.

Status Container,

Transport Order,

Status

Hinterland Transport

Terminals

other PCS



Disposal, **Status**





Customs declaration, Follow-up Procedures,

Status Customs



German Customs EU-Customs, **Customs of USA**, Canada, Israel, Japan

Declarations, Decisions,



Authorities

National Single Window, Harbour Master's Office, Office for Plant Health Control, Veterinary Office Border Control, Office for Health and Consumer Protection, Federal Agency for Agriculture and Food, Institute of Hygiene and Environmental Medicine, Water Police (GEGIS), ...



Carriers

Manifest/ENS, Status



Status



Disposal,



Truck Feeder Rail





GEGIS – Dangerous Goods Information System

Mandatory system covering all DG movements and storage within the harbour





PRISE – Port River Information System Elbe

Platform in its own right; useful source of information for ship movements















Tugs







Authorities



Terminals



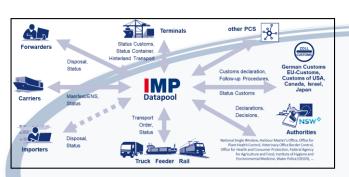
Belayers



1. Declaration for Export = MRN

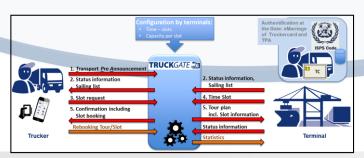
11. Confirmation of Export

Integrated platforms → exchange and re-use of data













Exporter

Export Customs office



Integrated platforms → exchange and re-use of data





Event driven workflows

Automation











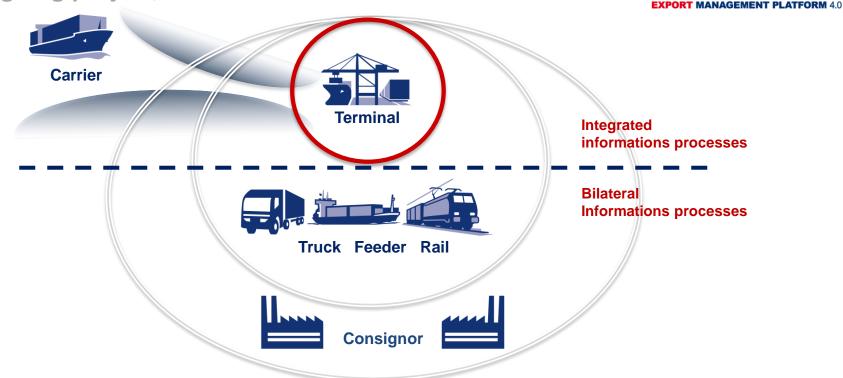
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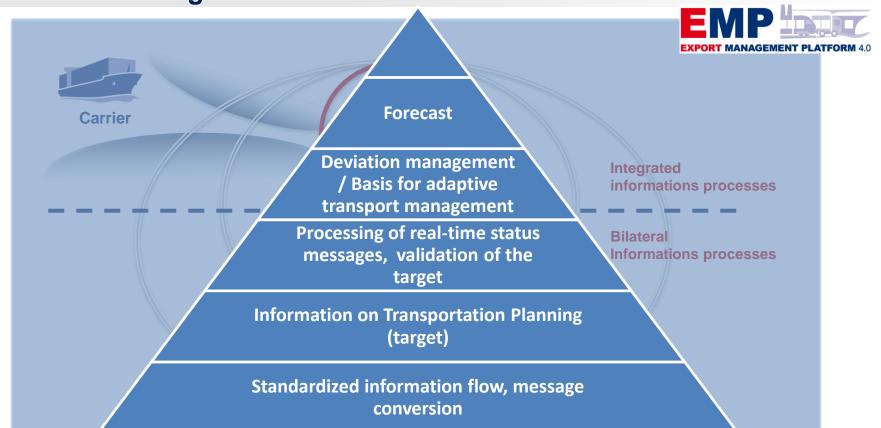
EMP 4.0 — improving the existing and extending towards Hinterland

Ongoing project, 2017 - 2020





EMP 4.0 – targeted architecture





Focus on processes and informationflow

















Terminal



Carrier



Exporter Forwarder

Depot

Truck Rail

Barge

Paperless Port with DAKOSY



A harbour in the middle of the city....

... is forced to grow in efficiency

The challenge

- ✓ Better pre-planning at the terminals
- ✓ Minimising traffic jam
- ✓ Management of truck movements

The remedy:

- ✓ Pre-anouncement of Trucks at the terminals
- ✓ Mandatory Slot-booking

❖ The solution - TRUCKGATE:

- ✓ 1994 Start of phase 1:
 - ✓ Only Transport Pre-Announcement (TPA)
 - √ Voluntary participation of truckers
- √ 2016 Phase 2: TPA mandatory
- ✓ 2017 Phase 3: Slot request mandatory







Vehicle Booking System (VBS) TRUCKGATE

managed by DAKOSY as

Configuration by terminals:

- Capacity per slot





- 3. Slot request
- 6. Confirmation including **Slot booking**

Rebooking Tour/Slot



5. Tour plan incl. Slot information

Status information

Statistics



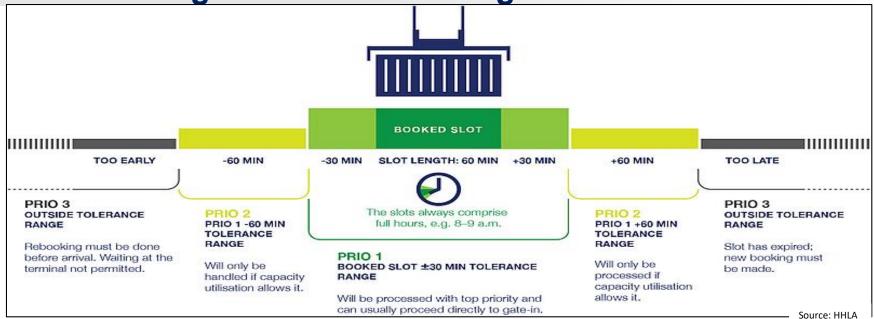
Authentification at

Terminal





Slot booking → the rules at the gate



Advantage for Truckers

- Avoids congestion and waiting at peak times
- If necessary, accelerated check-in

Advantage for Quay Operators

- More transparency with regard to anticipated truck traffic and the possibility of adapted resource planning
- Equipartition of tours throughout the 24 hour period



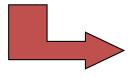


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Advantages for customers of the PCS The Single Window DAKOSY...

- ✓ provides standardized interfaces and processes and guarantees a high reutilization of data
- ✓ provides excellent planning criteria for all involved parties (thanks to early available data, event-driven and process-controlled)
- ✓ offers optimized tracking & tracing services alongside the whole chain of transport
- ✓ opens a wide range of possible process automation



- > shortened times of transport
- optimized usage of resources
- > able to match the demands of a strong growth in transport



... makes the port transparent!!

