



Smart Shipping – Challenges & Opportunities for the Great Lakes Region

Webinar for GLSL maritime stakeholders
9 July 2020

Outline

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Vision of the digital future

02 Values of Smart Shipping

Pains to relieve & gains to achieve

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Starting with your common pains in order to identify your potential gains & quick wins

05 From digitization to digitalization for Smart Shipping in the GLSL region

Iterative approach to implement Smart Shipping

The GLSL region: Winners of digitalization

Vision of the digital future



Imagine...

- There is **no congestion** on your waterways
- Relevant **information is available** whenever you need it
- Ships operate with **maximum safety**
- You meet the **environmental goals**
- Customers can rely on the **punctual arrival** of their goods
- All **resources** are used **most effectively** for the **collective benefit of the supply chain**

Smart Shipping will allow the GLSL region to unlock its full potential

Smart Shipping can create value for you

Value pools making waterway transportation more attractive



SAFETY



EFFICIENCY



INFORMATION



ENVIRONMENT



RESOURCES



RELIABILITY

How Smart Shipping increases safety

Pains and gains



Current Pains

- No transparency on planned routes
- Passage conflicts
- Dense traffic at bottleneck locations



Smart Shipping Gains

- Digital route exchange
- Identification of passage conflicts
- Planning for utilization of bottleneck infrastructure thereby reducing congestion

Smart Shipping gives you full **situational awareness** and allows you to **predict and avoid potential dangers**

How Smart Shipping increases efficiency

Pains and gains



Current Pains

- Waiting time at bottleneck infrastructure
- Unforeseen delays
- Waste of resources due to ineffective planning



Smart Shipping Gains

- Coordination at bottleneck infrastructure
- Predictability of arrival times
- Enabling optimized resource allocation
- Continuous improvement by business intelligence

Smart Shipping **reduces idle times** and ineffective use of resources

How Smart Shipping releases information

Pains and gains



Current Pains

- Various sources and systems
- Paper based information
- Repetitive information distribution
- No real time data



Smart Shipping Gains

- More standardized information
- More efficiency through paperless processes
- Secure exchange of data from one to many
- Real time data for everybody

Smart Shipping gives all stakeholders **access to the right** data while giving the **data owner full control**

How Smart Shipping affects the environment

Pains and gains



Current Pains

- Local and regional air emissions
- Avoidable fuel use
- Wildlife collisions



Smart Shipping Gains

- Reduce emissions by eliminating waiting time
- Reduce fuel use through eco-speed sailing
- Reduce marine threats to wildlife

Smart Shipping allows you to **improve your environmental performance**

Takeaways from the industry

Best practice solutions & their gains for the respective communities

JUST IN TIME ARRIVAL

Arrive at the port, river approach, lock or channel right at the time when you can be processed.

Examples



WÄRTSILÄ
NAVI-PORT



Reliable arrival time



Efficient, reducing waiting time



Safer, having less congestion



Environment friendly, reducing fuel use & emissions

Takeaways from the industry

Best practice solutions & their gains for the respective communities

VESSEL CALL OPTIMIZATION

Orchestrate all relevant services, speed supply chain connections and minimize your idle time.

Examples



Reliable arrival time



Efficient, reducing waiting time



Safer, having less congestion



Environment friendly, reducing fuel use & emissions



More effective, optimizing resource allocation

Takeaways from the industry

Best practice solutions & their gains for the respective communities

SLOT MANAGEMENT

Book and manage time slots for optimized use of limited capacities such as locks, restricted passages, service personnel and terminal berths.

Examples



Reliable arrival time



Efficient, reducing waiting time



Environment friendly, reducing fuel use & emissions



More effective, optimizing resource allocation

Takeaways from the industry

Best practice solutions & their gains for the respective communities

DATA PLATFORMS

Have one central platform, easy to access by all stakeholders to share relevant information.

Examples



Transparent, sharing relevant & real time data with everybody



More secure, standardized exchange of data with access control



Efficient, enabling paperless processes & business intelligence



More effective, reducing manual efforts

Transfer to the GLSL maritime region

Starting with your common pains in order to identify your potential gains & quick wins



SAFETY

“What is causing safety risks in your region?”



EFFICIENCY

“Where do you waste time or resources? Where could you be more efficient?”



INFORMATION

“Where do you need information from whom and when?”



ENVIRONMENT

“What do emissions mean to you? Where do you need to take action for sustainability?”



RESOURCES

“Where are your challenges regarding resource allocation?”

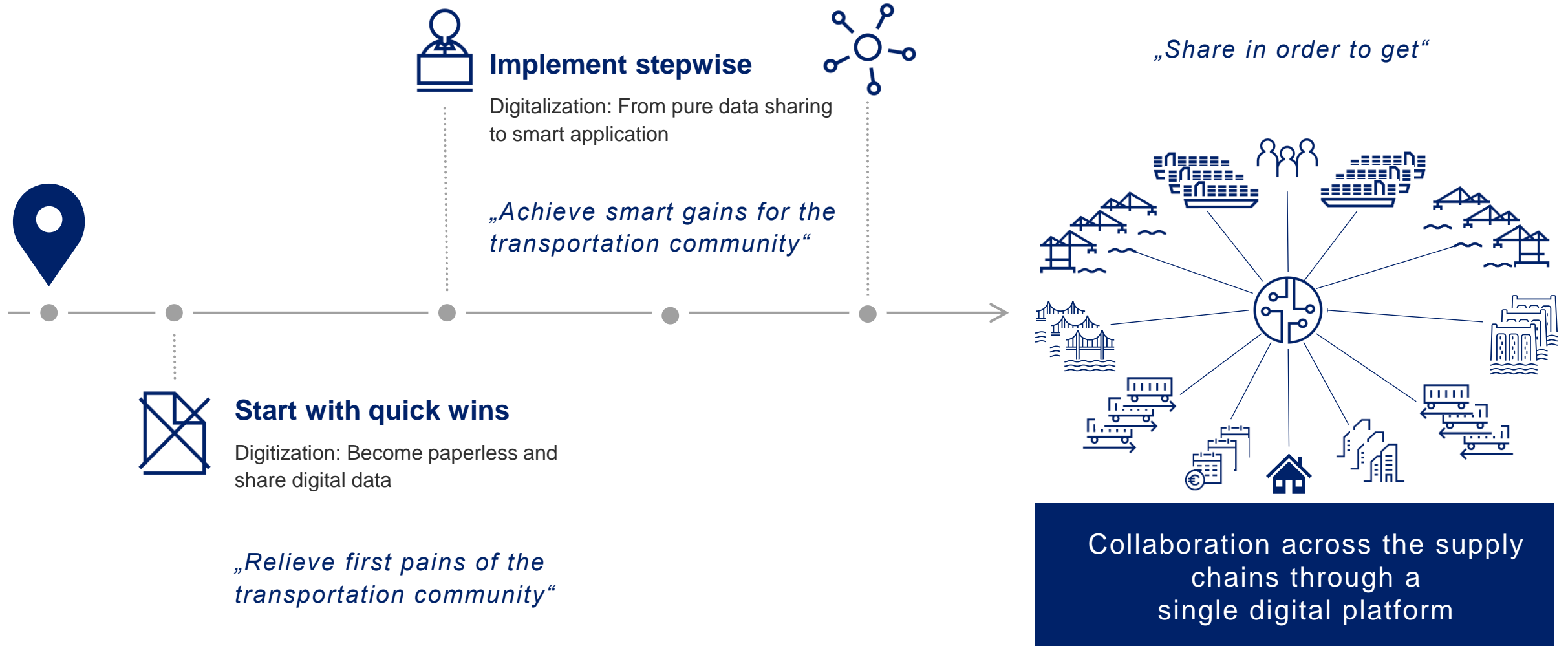


RELIABILITY

“Where do you have issues due to unreliability?”

From digitization to digitalization for Smart Shipping in the GLSL region

Iterative approach to implement Smart Shipping





Thank you!

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