

Smart Track 4 Waterway

*Smart **Tracking** Data Network
for Shipment by Inland **Waterway***

*Modal shift to waterway fostered
by hierarchical tracking*

An European consortium

Partners



Other participants

Pallets take the boat !

Palletized freight is generally carried by road:

- ⇒ In small volumes
- ⇒ Directly from point A to point B

Main impediments to modal shift from road to waterway:

- ⇒ IWT needs:
 - additional transshipment operations
 - adapted vehicles and infrastructures for pallet handling
 - bundling of several small volumes
 - more complex logistics engineering
 - more administrative burden



ST4W breakthrough

Hierarchical tracking data exchange platform:

⇒ **linking tracking data from fragmented sources:**

- vessels & trucks geo-localization
- last known location of logistics units (pallets ...)
- successive cargo tracking in multimodal environment:
 - what pallet in what vessel, in what truck?

⇒ **sharing standardized & secure information:**

- where everyone is master of his own data
- and shares it only with chosen partners

⇒ **proposing real time follow-up of shipment:**

- end to end seamless visibility
- synchronization between logistics & IWT actors

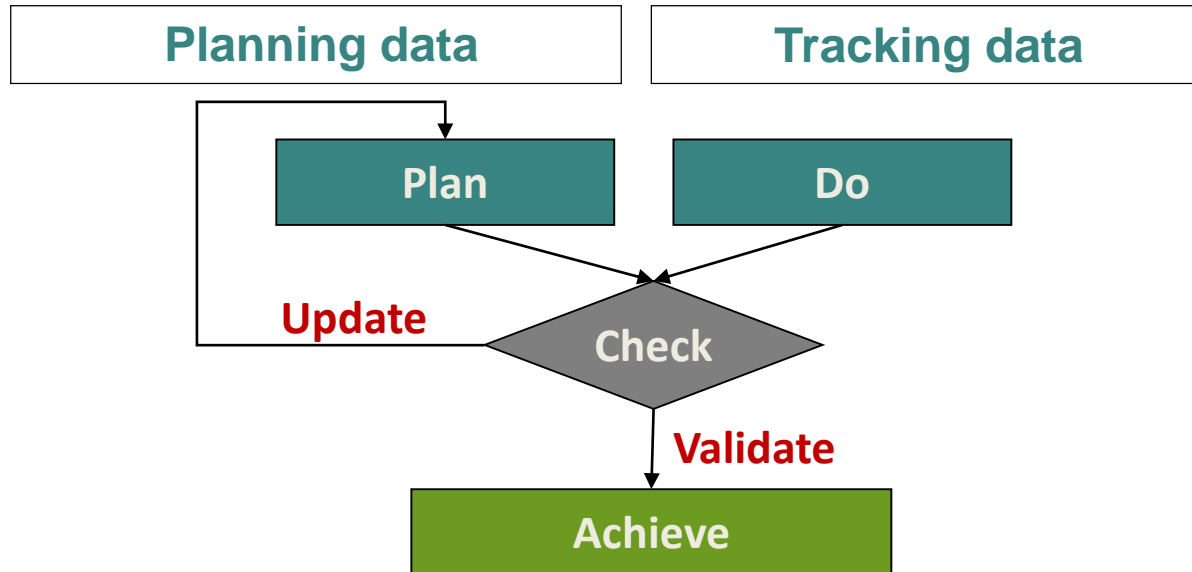
⇒ **tackling modal shift impediments:**

- multi-stop & multi-client vessels



Proposing real-time follow-up of shipment

- ⇒ Automatic update of logistics unit status (pallet, container ...)
- ⇒ Automatic alert in the case of delay or loading the wrong logistics unit
- ⇒ Real-time update of ETA (Estimated Time of Arrival) of each logistics unit, throughout the multimodal supply chain
- ⇒ Electronic proof of delivery at each step



Hierarchical tracking with on board smart-phone

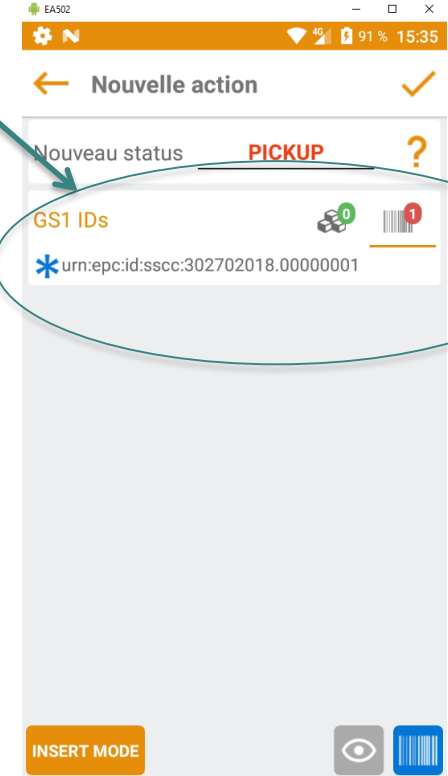
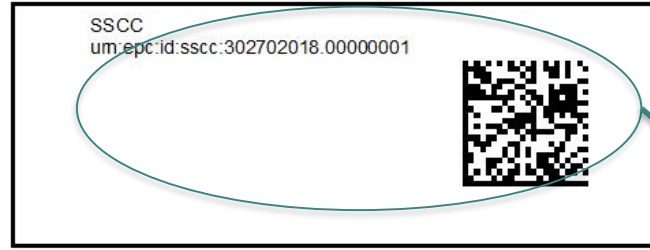
EA502

2019-09-26

Roosens Beton		DELIVRÉ
Roosens Bétons - Quai	2019-09-24	
7181 Seneffe	23:59	
Gobert Matériaux - Anderlecht	2019-10-25	
1070 Anderlecht	23:59	

Roosens Beton		DELIVRÉ
Roosens Bétons - Quai	2019-09-24	
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1070 Anderlecht	23:59	

Roosens Beton		ENCODÉ
Roosens Bétons - Quai	2019-09-26	
7181 Seneffe	23:59	
Gobert Matériaux - Anderlecht	2019-09-27	
1070 Anderlecht	23:59	



Multimodal shipment status

Planing & Progress

Ship From

Grand-Couronne

FR

Normande de Manutention Bolloré

76530

Rue Henri de Rochebouet

Waypoint 1

Gennevilliers

FR

Paris Terminal

92230

6 Route du Bassin Numéro 1

Ship To

Bonneuil sur Marne

FR

5 Route de Stains Bonneuil sur Marne

94380

5 Route de Stains

Planed Time

Departure

Mar 1, 2022

Arrival

Mar 1, 2022

Departure

Mar 1, 2022

Arrival

Mar 1, 2022

Estimated Time

Departure

Arrival

Departure

Arrival

Actual Time

Departure

Mar 1, 2022

Arrival

Departure

Arrival

PICK-UP Normande de Manutention Bolloré

Multimodal shipment status

Planing & Progress	Ship From Grand-Couronne FR Normande de Manutention Bolloré 76530 Rue Henri de Rochebouet	Waypoint 1 Gennevilliers FR Paris Terminal 92230 6 Route du Bassin Numéro 1	Ship To Bonneuil sur Marne FR 5 Route de Stains Bonneuil sur Marne 94380 5 Route de Stains
	Planed Time	Arrival	Arrival
	Departure Mar 1, 2022	Departure Mar 1, 2022	Arrival Mar 1, 2022
	Estimated Time	Arrival	Arrival
	Departure	Departure	Arrival Mar 2, 2022
Actual Time	Departure Mar 1, 2022	Arrival Mar 1, 2022 Departure	Arrival
PICK-UP Normande de Manutention Bolloré			
ARRIVED AT PF Paris Terminal			

Multimodal shipment status

Planing & Progress

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Mar 1, 2022

Departure

Mar 1, 2022

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PICK-UP Normande de Manutention Bolloré

ARRIVED AT PF Paris Terminal

TRANSHIPMENT Paris Terminal

Multimodal shipment status

Planing & Progress

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Arrival

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Arrival

Mar 1, 2022

Departure

Mar 1, 2022

Arrival

Mar 1, 2022

PICK-UP Normande de Manutention Bolloré

ARRIVED AT PF Paris Terminal

TRANSHIPMENT Paris Terminal

DROP-OFF 5 Route de Stains Bonneuil sur Marne

Belgian pilot

Construction materials:

- Tests with BLL & Roosens, Shipit & Knauf
 - 44 vessels voyages have been done
 - Including 5 multi-stop voyages
- 85 other miscellaneous voyages



Interreg North-West Europe ST4W

Dashboard

Transport

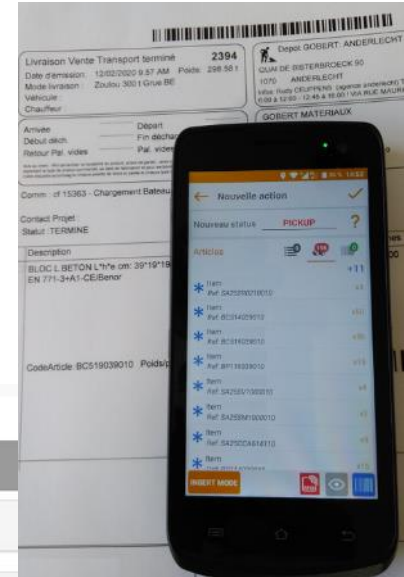
Home > Transports > Transport Detail

Transports Instruction View

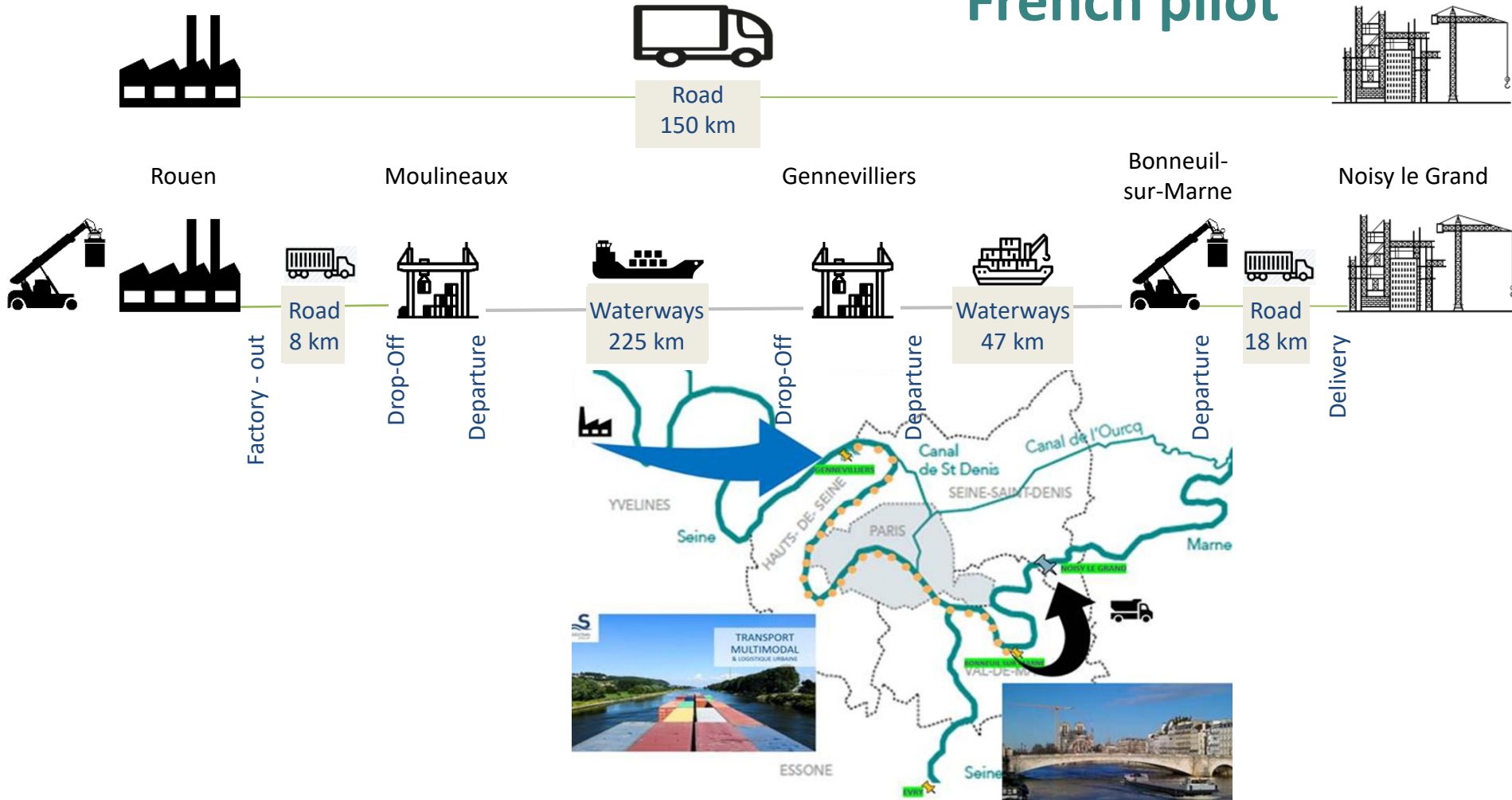
From ::
Rue Wauters 152
Seneffe - 7181
BE
urn:top.sgh:L42501561.020.0

To ::
90, Quai de Biestebroek
Anderlecht - 1070
BE
urn:top.sgh:L42501561.021.0

Date Create	Class Content	Direction	Edi Status
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12/02/2020 08:28:15	TransportInstructionResponseMessageType	←	ACCEPTED
11/02/2020 17:38:02	TransportInstructionMessageType	→	SENT



French pilot





Moulineaux



Gennevilliers



Bonneuil



Noisy le Grand



Better connect IWT with multimodal last-mile logistics

Digital interconnection: ST4W tool for synchronisation

- Data exchange between IWT and urban logistics tracking systems
- Resource booking shared planning
- Management of multi-products & multi-clients operations

Physical interconnection: Innovative vessels and transshipment

- Flexi-malle
- GreenWave
- Zulu
- Oorderdam



Key components

Last-mile thanks to eco-friendly cargo-bikes and vans



Circular IWT logistics



Test-beds will include Paris, Lille, Liège, Brussels and Ghent.