

# Finnish SafeSeaNet and Implementation of new MNSW





Olli Soininen
Programme manager - Fintraffic VTS
olli.soininen@fintraffic.fi

### Fintraffic





We offer and develop traffic control and management services on land, at sea and in the air.

We also produce digital services and up-to-date open-source traffic data for operators and end users in the transport ecosystem.

Our services support the mobility of citizens, the needs and logistics of the business community, the operations of the security authorities and the competitiveness and welfare of Finland.

We employ 1,100 professionals.



**FINTRAFFIC RAILWAY** 



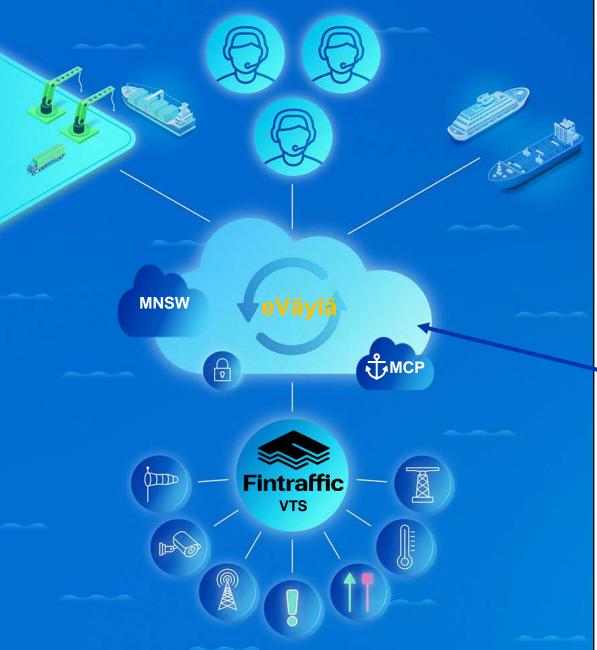
FINTRAFFIC AIR NAVIGATION SERVICES



**FINTRAFFIC ROAD** 

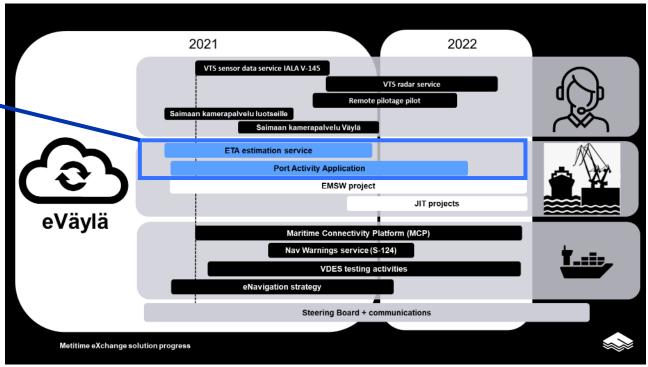


FINTRAFFIC VESSEL TRAFFIC SERVICES



### eVäylä

provision of vessel traffic management and control services in a way that ensures the safe and smooth operation of traffic on waterways. As part of this, Fintraffic VTS aims to accelerate the development of automation and digitalization in the industry and has taken a stronger role as a provider of new, intelligent maritime information services and a strengthened situational picture through the eVäylä development project.

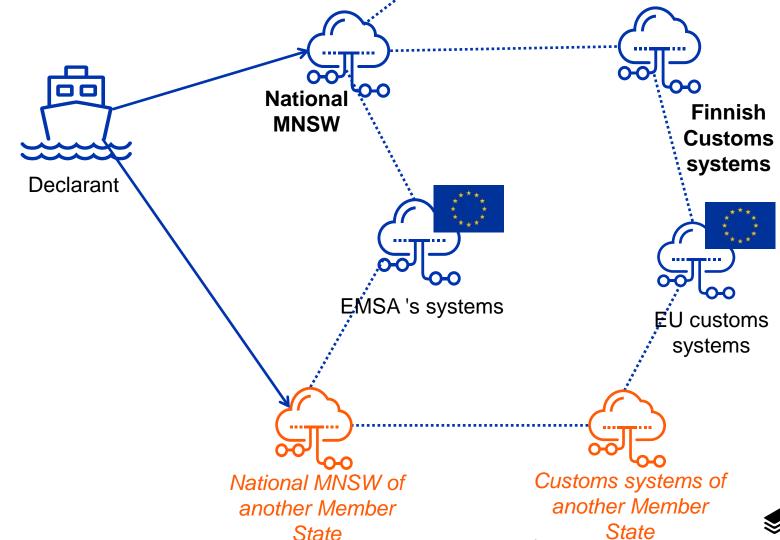




## Finnish Maritime National Single Window - NEMO

National services (MNSWs) provide notifiable and harmonized user and application interfaces for declarants.

The aim is to facilitate the electronic transmission of information related to reporting obligations for ships port calls at Union ports, staying in Union ports and leaving Union ports. The EMSWe environment allows for the exchange of onceentered data between Member States.



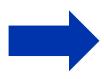
Other Finnish authorities

and stakeholders



### The change

Port call reporting obligations cause unnecessary administrative burden as reporting is almost, but not quite harmonized across EU member states



Tighter harmonization with binding legislation on EU level

Finland's current NSW system, Portnet, is nearing the end of its life cycle



EMSW NEMO project to build new system

Stakeholder requirements clearly extend beyond the scope of EMSW regulation



Facilitated dialogue to establish mutual understanding of requirements, possibilities and way forward of the value added services



### Planned schedule for the EMSW project (NEMO)

Definition and conceptualization phase 12/2020 - 6/2022

Building phase 6/2022 – 3/2025

Deployment and operation phase 3/2025 -

#### 2020



Establishment and design of a project management mode



Stakeholder communication



Requirements for valueadded services

### 2021

- External communication
- Website as well as a quarterly letter to stakeholders
- Public tender
- Architecture
- User needs and requirements
- Control plans

#### 2022

- SafeSeaNet service renewal
- HRIM component
- Implementing access control
- Nautilus

#### 2023

- The first testing phase
- Clarification of the technical specification from the EU
- Customs integration

#### 2024

- Second testing phase

#### 2025

Preliminary implementation 3/2025 Commissioning 8/2025 Support service and website

**Building an EMSW system** 

**EMSW Maintenance Planning** 

Responsibility

Traficom

Fintraffic VTS

2020

2021

**EMSW-project** 

2025

Workshops for value-added service providers

Implementation of the value-added services platform

Fintraffic reference notifier implementation

**POC & testing activity** 

Implementing acts and technical specifications 15.8.2021

EU common access control EU common databases

EU Commission notification interface Module (HRIM) 15.8.2022



### Finnish EMSW Program – content

MNSW (NEMO)

MNSW Service desk SafeSeaNet national connection point

Maritime Transport Statistics Service 2 (MLT 2) Passenger reporting service for small passenger ships (NAUTILUS)

Value-added port and ship services



# Phased introduction of information systems

- Portnet (NSW)
- Maritime transport statistics service (MLT)
- SafeSeaNet-connection proxy (SPOC)

2021: Present time

### 2023: NAUTILUS operational

- Portnet (NSW)
- NAUTILUS
- maritime transport statistics service (MLT)
- SafeSeaNet-2 (SPOC2)

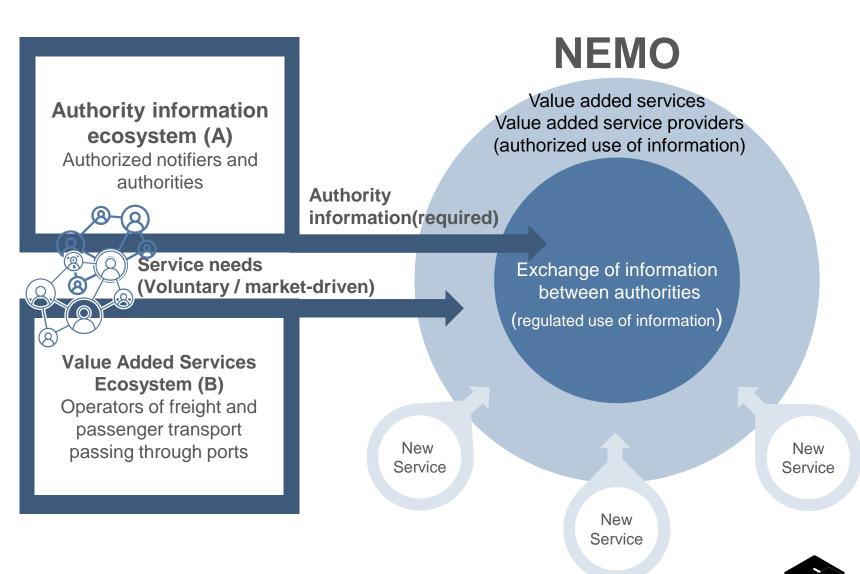
- NEMO
- NAUTILUS
- maritime transport statistics service 2 (MLT2)
- SafeSeaNet-3 (SPOC3)

2025: NEMO,
Maritime Traffic Statistics
service 2
SPOC 3 operational



### National Maritime Notification Service and (NEMO) Value Added Services

- Value-added services are services of general interest or commercial services published for notifiers or other operators
- The need and supply of services will develop naturally later
- The NEMO system authority information ecosystem is used for reporting formalities related to port calls
- Open traffic data is published in the Fintraffic public (digitraffic) interfaces for use in the development of value-added services
- ► From the beginning of 2023, Fintraffic VTS will start work on defining a publishing platform for value-added services.



### The project identified a total of 59 valueadded services in nine different categories

### Ship port control

- Ship mooring, unmooring and hauling services
- Pilot order
- Tug order
- Harbor icebreaking
- Information on restrictions on port assistance

### **METOC** and port information

- · Weather data: Water level, Wind data
- Pier information: minimum length and draft
- Preliminary information on the port: situation and schedule of berths, moorings
- Winter shipping materials (ice charts, etc.)

#### **Crew related services**

- Crew transportation
- Crew changes (customs)
- Crew accommodation services
- Catering orders
- Health testing and COVID testing
- Making a maritime health declaration
- Comprehensive crew lists for authorities (PTR)
- FAL Supplementing passenger and crew information with shipping company information

### Passenger related services

- Passenger transport
- Subscription for assisted passenger (disabled) assistance service
- Health testing and COVID testing

### Ship operation services

- Maintenance related services
- Sanitation inspection order
- Ship security services, eg law enforcement
- Orders for various inspections
- Up-to-date ship depth information
- Icebreaking assistance plans
- Billing services for paid services
- Various reporting services (waste, security screening)
- Preliminary inquiries and instructions / restrictions for VA cargoes
- Receipt of dangerous goods
- Time of service deliveries
- Time information services for various events: VTS area, pilot station, pier, etc.
- Announcements of registration numbers of future cars

**Commodities and waste** 

### cargo information to port operators Desired lead time window related

Transmission of ship and

- to ship deliveries
- · Continuous transmission of realtime vessel time data (intelligent EEA times)
- Port-specific ISPS formalities: driving licenses, security regulations, route signs, port maps
- Transmission of unloading time information to all ro-ro units (currently only for trailers)
- Ro-ro traffic: a standard database for ship traffic for professional traffic
- · From land to sea: land consignment note (eFTI) linked to the cargo unit in question
- Messaging service between the land freight side and the shipping companies
- Port billing information freight charge discounts, congestion charges, etc. information needs
- Comprehensive (more accurate) cargo, ie cargo manifest information for Customs

### Value-added services for land logistics operators

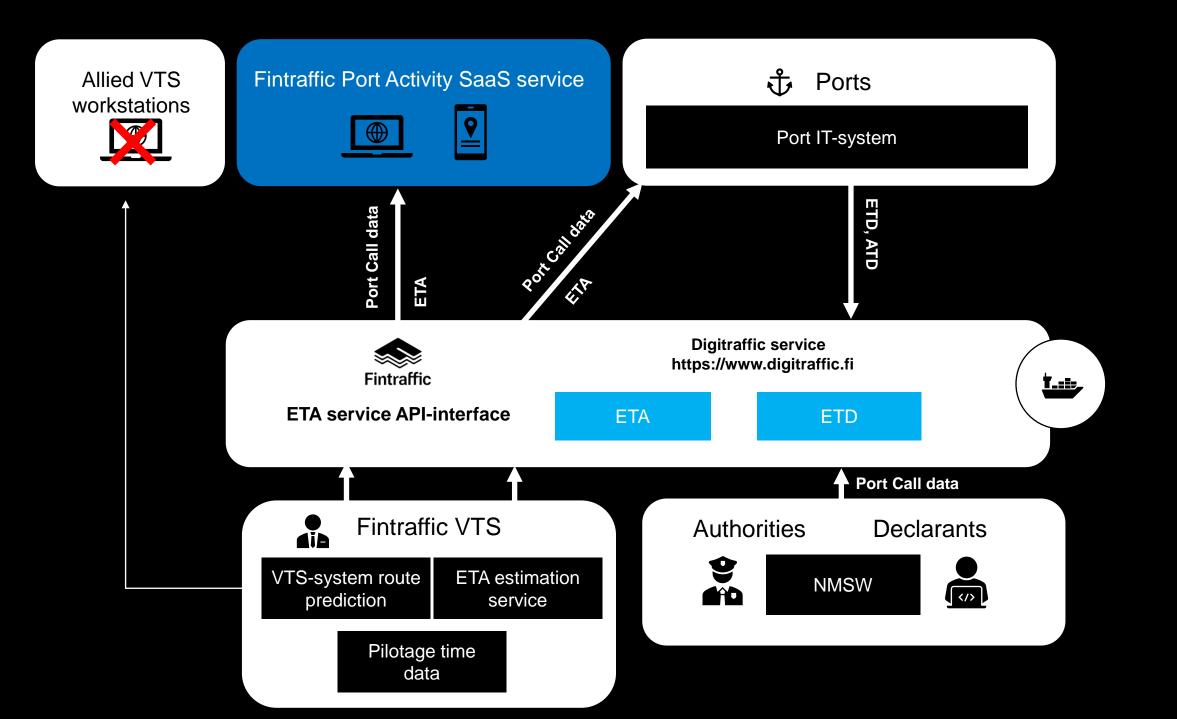
- · Real-time scheduling information related to the arrival of the vessel for land transport operators
- Traffic light rhythm and traffic control solutions
- · Maps and routes of the port area compiled for land transport operators
- Preliminary information on traffic disruptions and estimated additional time, eg by SMS message
- Route guidance optimized for conditions for freight traffic
- Land cargo tracking data to port: time of arrival of cargo or unloading equipment at port.
- Cargo tracking solution in port: the time

### **General information services** and functionalities

- Interfaces to historical data
- Communication services between actors
- Alarm function related to NEMO data
- Age of assessment data and providing authority
- Wolt-like service for goods obtained from outside the port
- Automation of bus charges



- Water sales
- Waste collection or receipt
- Bunker order
- Shore power





### NEMO, PLATFORM FOR MARINE TRAFFIC INFORMATION

