

REMOTE PILOTAGE?



REORGANISATION OF FINNISH AUTHORITIES 1.1.2019



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Authority:

- Certificates
- Compliance
- Rules and regulations



Finnish Transport
Infrastructure Agency
(planning, developing and
maintaining the transport
network)



Goverment owned
company having
monpoly based on
national legislation



FINNPILOT



YEAR
2018
IN BRIEF



Finnpilot in figures

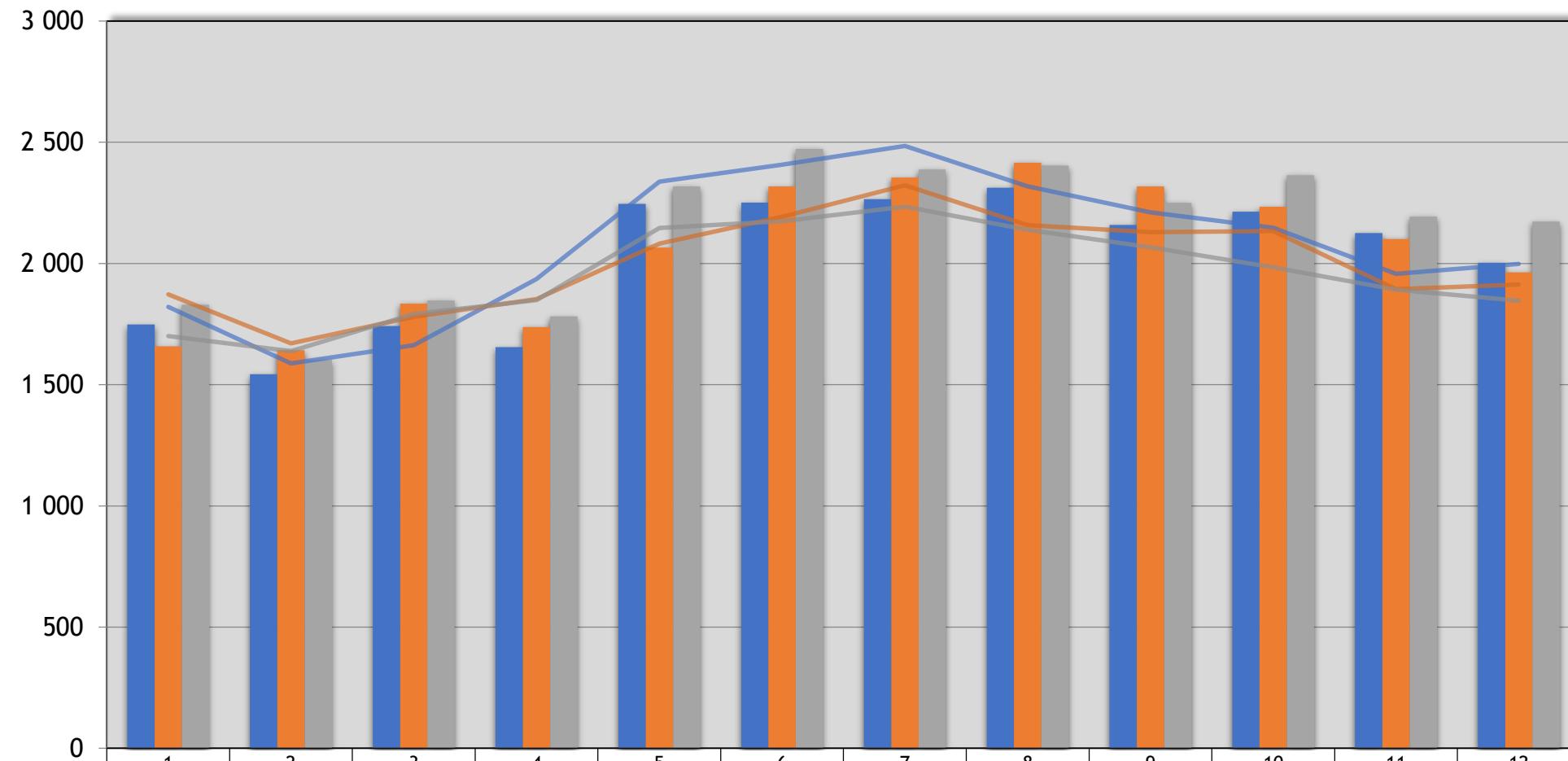
<https://finnpilotvuosiraportti.fi/en>

- 25 616 pilotages
- 484 959 piloted miles
- More nautical miles per person-day piloted than ever before

- ~35 % of ships visiting FI ports use pilot
- Turnover 40,3 milj. euro
- Profit 3,6 milj. euro
- Equity ratio 66,1%
- Personnel 340 (13 new pilots recruited, approx 12 will be recruited in 2019)
- Service level target fullfilled 99,9 %

Monthly pilotages

T2017 B2018 E2018 T2014 T2015 T2016



Finnpilot “market share”

LUOTSAUSalue	2014	2015	2016	2017	1-6/2018
KOTKA	80,7 %	78,2 %	77,6 %	91,3 %	91,8 %
HELSINKI	26,6 %	26,0 %	25,3 %	24,8 %	28,3 %
SAARISTOMERI	12,4 %	12,6 %	11,4 %	11,8 %	13,7 %
SELKÄMERI	77,9 %	80,2 %	80,8 %	83,7 %	82,1 %
PERÄMERI	69,7 %	69,3 %	69,5 %	68,6 %	70,7 %
Kaikki yhteenä	33,7 %	32,9 %	31,9 %	32,5 %	35,7 %

All port calls

LUOTSAUSalue	2014	2015	2016	2017	1-6/2018
KOTKA	84,0 %	81,2 %	81,3 %	95,5 %	95,5 %
HELSINKI	85,2 %	78,9 %	77,5 %	71,4 %	76,2 %
SAARISTOMERI	50,4 %	51,1 %	47,9 %	48,7 %	58,4 %
SELKÄMERI	80,4 %	82,4 %	82,6 %	86,2 %	84,7 %
PERÄMERI	82,2 %	82,8 %	81,7 %	81,4 %	84,0 %
Kaikki yhteenä	75,5 %	74,0 %	72,9 %	74,0 %	78,5 %

Foreign traffic
(passenger and
ropax excluded)

Statistics from Transport Agency and FinnpiLOT

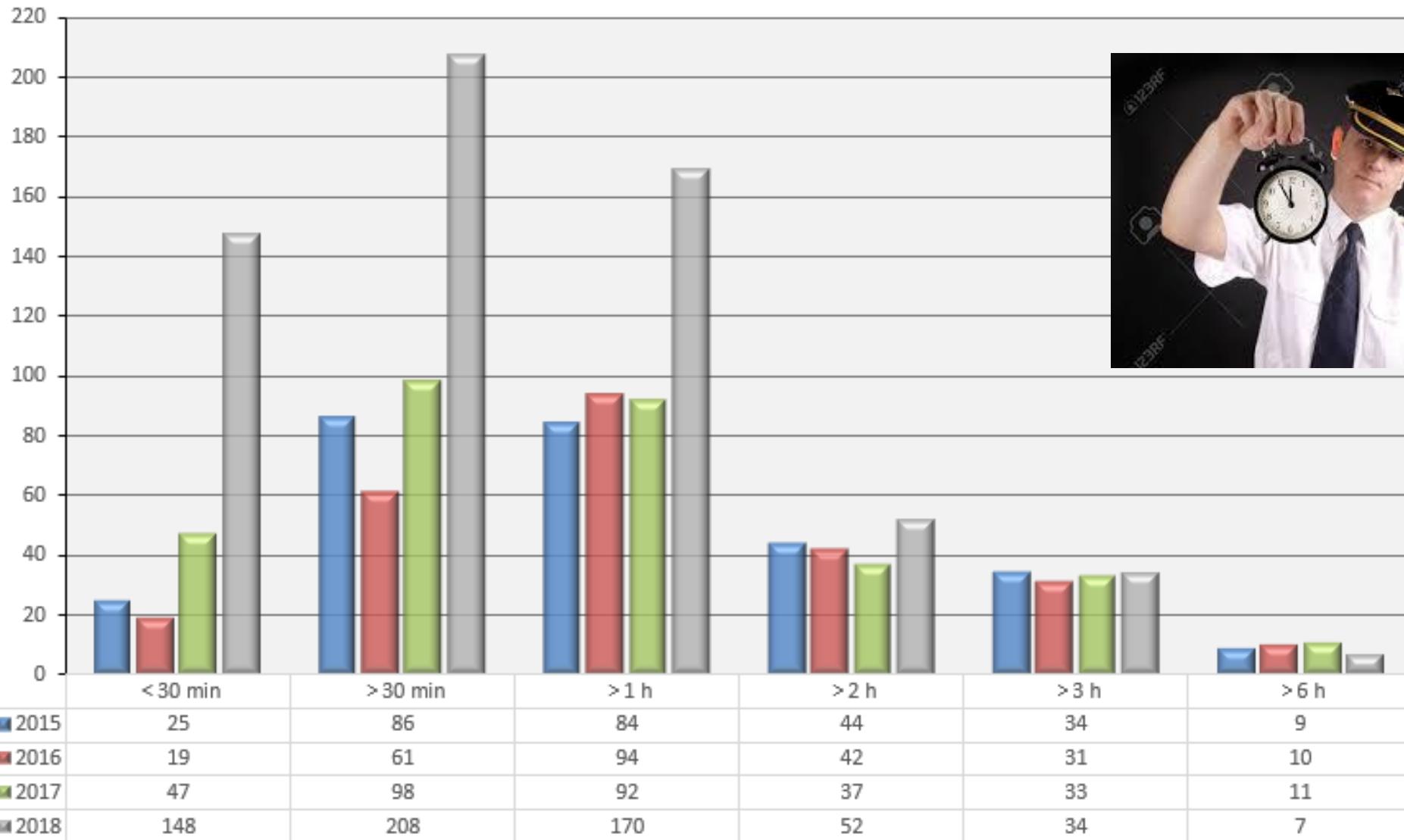
Waiting for the pilot...

■ 2015

■ 2016

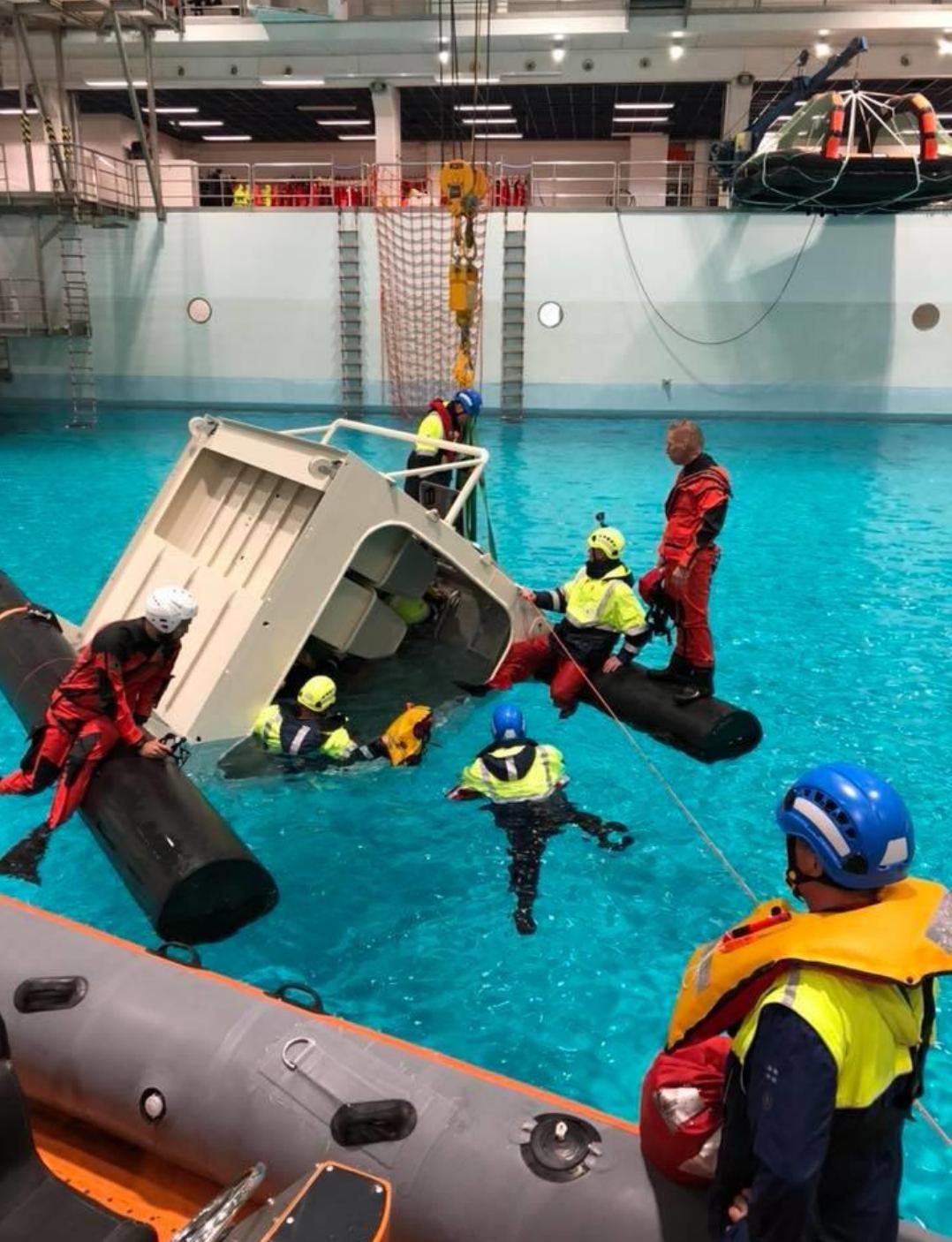
■ 2017

■ 2018

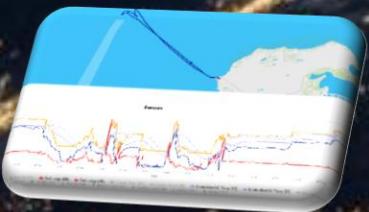


Finnpilot Academia

- Basic training of new pilot - duration 6 months, documented familiarization and training for equipment e.g. Wärtsilä Pilot Pro (PPU).
- On duty- mandatory: Pilot competence requirements for certificates.
- On duty- Finnpiot company training:
 - Safety training (STCW) including rescue from a capzized pilot boat
 - Special case simulations (new port structures or fairways, wind conditions, etc.)
 - Escort towing, "basic towing" and towing training for particular ports or ships
 - Winter navigation training
 - Maritime Crew Resource Management (MCRM) for pilots
 - Azipod-propulsion training (ABB)
 - Panamax training module
 - etc.



DATA INTENSITY



Collecting AIS data

Internal processes
digitalized

Fleet management

Vessel independent
navigation

Analysing tool

Pilot Online



Analysing process for
pilotages

Pilotage data collection

ePilotage

Data set for pilot
from analysing tool

TIME

TODAY

Future Fairway
Navigation

ePilotage concept is a set of actions aimed at the development of the pilotage service process i.e.

- transportation,
- transportation planning,
- resource planning,
- pilotage and
- invoicing.

The main focus of ePilotage is the development of information gathering, production and processing to enhance the pilotage service process.

The outcome of ePilotage is new methods for providing pilotage such as remote pilotage and new solutions to improve the pilotage today.

Amendments to Finnish Pilotage Act 1.2.2019

- Allowing the pilot to perform his or her duties somewhere else than onboard the vessel.
 - Experiments, permit from TRAFICOM, valid for 5 yrs.
- Temporary pilot boarding position
 - Hearing of VTS
 - Traficom decision based on application from FinnpiLOT
- Finnish Defence Forces are able to exempt foreign state vessels from the obligation to use a pilot. The Defence Forces may exempt vessels that take part in a training or exercise organised by them, participate in another form of defence cooperation or are hosted by the Defence Forces.



FINNPILOT



LVIVV MINISTRY OF TRANSPORT AND COMMUNICATIONS

Press releases Areas of expertise Publications The Ministry Admin

Remote pilotage allowed

PRESS RELEASE 17.01.2019 15.33 fi sv en



Pilot boat [Photo: Jeffrey B. Banke / Shutterstock]

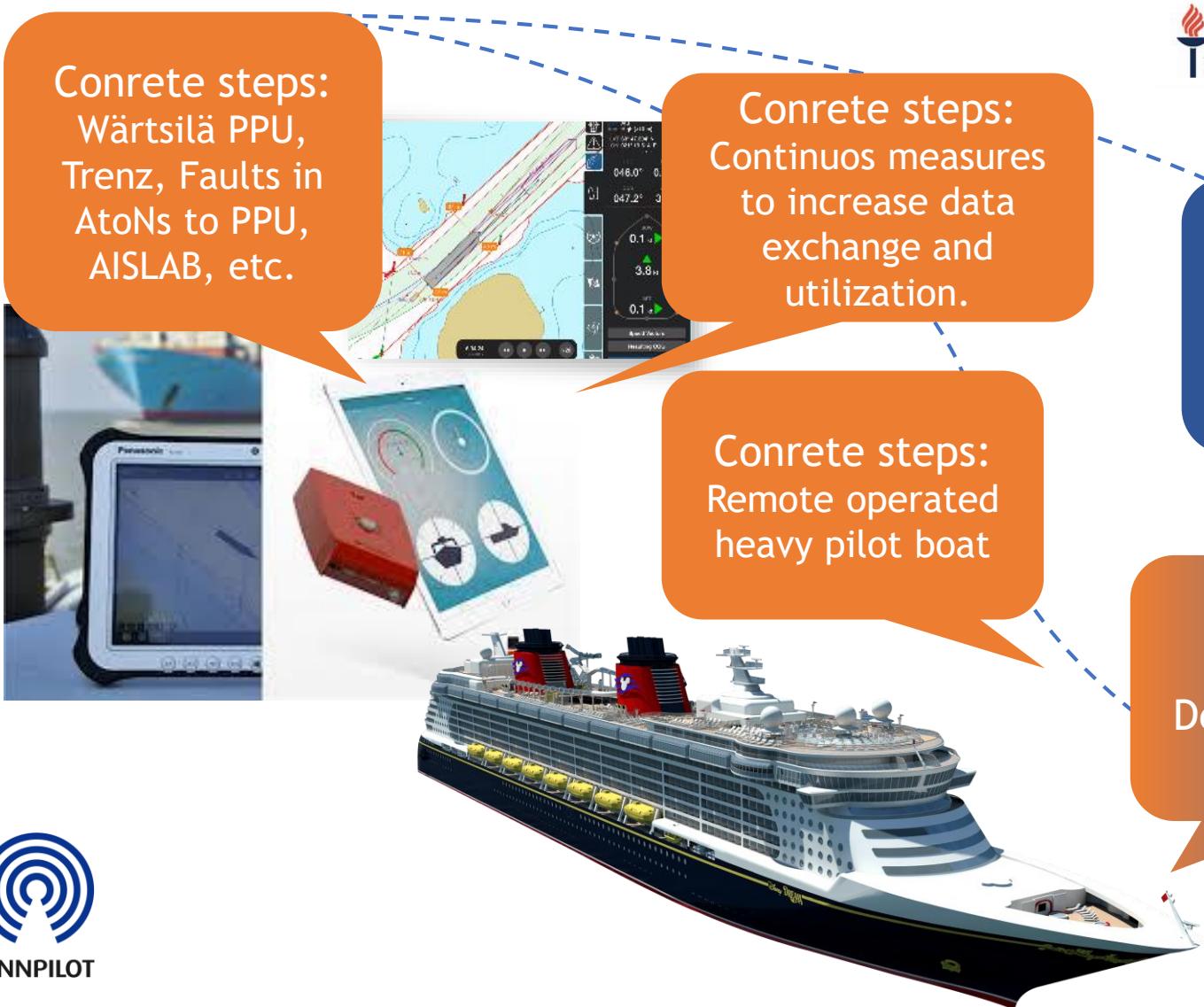
Remote pilotage subject to authorisation will be allowed in those public channels in Finnish waters and in the Saimaa Canal lease area that have been marked as

Remote Pilotage

- A pilotage company has to apply for an authorisation from the Transport and Communications Agency (TRAFICOM). A requirement for granting an authorisation is that remote pilotage will not as such or in combination with other functions cause any danger to vessel traffic safety or any harm to other vessel traffic or the environment.
- The remote pilotage authorisation defines the routes and parts of routes where remote pilotage is allowed. It also determines the vessels involved and the origin and destination of the remote pilotage. The authorisation will be granted for a maximum of five years and can be renewed if necessary.



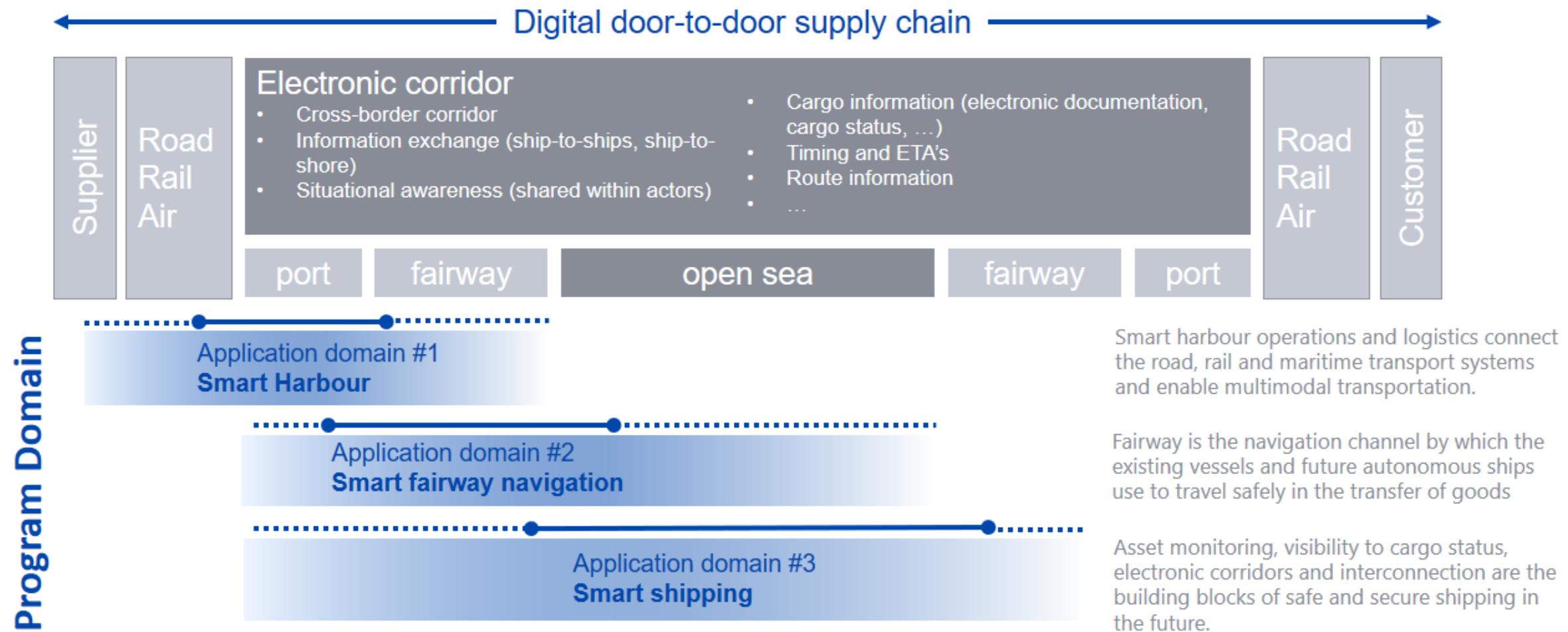
Development path to future pilotage services



Remote pilotage - NOT remote operation



Digital and autonomous maritime transport chain



Smart harbour

Smart harbour operations and logistics connect the road, rail and maritime transport systems and enable multimodal transportation.

Experiments

- Automated Cargo handling and logistics
- Information flow and API's

Companies

- Ericsson
- Euroports
- F-Secure
- Lingsoft
- MacGregor
- Port of Rauma
- Rolls-Royce
- Satel
- Tieto
- UPM
- Wapice
- FinnpiLOT
- Finnish Transport Infrastructure Agency
- Finnish Meteorological Institute
- Traficom

Research organisations

- Aalto
- Novia
- JyU
- UTU
- TUT+UTA (tuni.fi)
- VTT
- ÅA

Smart fairway navigation

Fairway is the navigation channel by which the existing vessels and future autonomous ships use to travel safely in the transfer of goods.

Experiments

- Remote pilotage
- Robotic systems for VTS & SAR
- Smart aids to navigation

Companies

- Alamarin-Jet
- ESL Shipping
- Ericsson
- F-Secure
- Lingsoft
- Meyer Turku
- Port of Rauma
- Rolls-Royce
- Satel
- Tieto
- Wapice
- FinnpiLOT
- Finnish Transport Infrastructure Agency
- Finnish Meteorological Institute
- Traficom
- MeriTaito
- Arctia
- Estonian Maritime Administration

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Smart shipping

Asset monitoring, visibility to cargo status, electronic corridors and interconnection are the building blocks of safe and secure shipping in the future.

Experiments

- Tallinn-Helsinki electronic corridor for smart shipping

Companies

- Ericsson
- F-Secure
- Lingsoft
- MacGregor
- Meyer Turku
- Port of Rauma
- Rolls-Royce
- Satel
- Tieto
- Wapice
- FinnpiLOT
- Finnish Transport Infrastructure Agency
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- Traficom

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A photograph of two bright red pilot boats docked at a harbor. The boat on the left has 'PILOT' written on its side and several black tires hanging from its side. The boat on the right also has 'PILOT' written on its side. They are reflected in the calm water of the harbor. In the background, there is a rocky breakwater and a clear sky.

THANK YOU!