DanPilot

DanPilots perspective/use of E-navigation

Your Time, Your safety – Our commitment
Roadmap of this presentation

DanPilot – a major pilotage provider
- In numbers
- Transit
- Port
- STS

E-nav in a DanPilot perspective
- E-nav definition
- Collection
- Integration
- Exchange
- Presentation
- Analysis

What then?
- Present situation
- The desired future
DanPilot – a major pilotage provider

- App. 21,000 pilotages performed per year
- App 50% transit and 50% port pilotages
- App. 1.5 mil. NM performed
- 160 pilots
- 100 boat men
- 22 pilot stations
- 30 pilot launches
- Serving 68 ports
- Full service provider
- 100% owned by the Danish State
- Obligated to serve all Danish ports & transit fair ways
- Non profit company – self financed (no subsidies)

Source: DanPilot 2017
DanPilot – a major pilotage provider

Source: Westerskov, Svane & DanPilot 2017
DanPilot – a major pilotage provider

Source: Westerskov 2014
E-nav in a DanPilot perspective

Plan

Peer Coaching

Simulator

Do

ISO 9001:2015

Innovation

Pilotage

Increased Safety and Value creation

Customer relations

Control

Act

Source: Westerskov 2016
E-nav in a DanPilot perspective

+ port server facilities

- OTA (Over The Air) differential corrections
- Personal folder with backup of each iPad
- Web interface for Electronic Navigational Chart (ENC) management and distribution to iPads
- Real time traffic overview
- Automatic synchronization between ship and shore
- Distributes live position data with predicted paths between pilots (via the SafePilot App) and shore based SafePilot clients
- Central management and distribution of files as routes, tender lines, distance lines, locks, etc. to iPads by web interface
- Data recording and storage

Source: Trelleborg 2017
E-nav in a DanPilot perspective

E-navigation is defined as “the harmonized collection, integration, exchange, presentation and analysis of marine information on board and ashore by electronic means to enhance berth to berth navigation and related services for safety and security at sea and protection of the marine environment.”
E-nav in a DanPilot perspective

Collection & Integration:
All voyages with DanPilot can be seen, recorded, analyzed and shared between pilot-pilot and pilot-operations. As an example all pilots can monitor/identify vessels with pilots from DanPilot onboard real time

Exchange:
Replay is possible of all recorded pilotages performed enabling preparation of best practice, safe operation & route optimization. The stored data can further be use in simulators and E-learning. The PPU is used in the simulator, on board the vessels and for evaluation/documentation

Presentation:
In this case a PPU (Portable Pilot Unit) IPAD with SafePilot software
What then?

Present situation:

Equipment on board are not ready to support integration in relation to data exchange. All data exchange (AIS, nav.warn, notice to mariners, annotations, chart updates, routes etc.) are made via a web based interface. Data has to be found on many different webpages.

Source: Rønn 2016
What then?

Desired future:

Instead of individual managed web interfaces; a one point of contact with the required data possibilities via e.g. a maritime cloud, would be of great benefit. This would enable a link between vessel-vessel and vessel-shore.

Source: Svane 2016
What then?

The final success (implementation and usage) depends on whether the concept of E-nav creates the necessary conviction amongst stakeholders that it creates increased safety and monetary value.
Common goal

Thank you

Source: Westerskov 2009