



Norwegian Ports Database

NHC64 Agenda item C4 Norway



Digitalization and standardization of port data, why?

- Better digital services
 - Less e-mails back and forth (100+ e-mails/10 h work for each port call)
 - Digital twin
 - 3D models, simulating port calls with small margins
 - New products: S-102/S-129 UKC
 - InnovationUtilization of ships loading capacity
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 - 60 cm deeper port basin = 3000 tonn extra
- Autonomous operations
- Waste management: recive sorted waste from ship
- Establish new industry based on ports capacity
- Preparedness

Users

- Port authorities
- Municipalities
- Government agencies
 - The Norwegian Coastal Administration
 - The Norwegian Mapping Authority
 - The Norwegian Hydrographic Office
 - The Norwegian Pilots and Emergency Services
- Norwegian Armed Forces
- The Norwegian Pilots
- Emergency Services
- Business development
- Ships, shipping companies, navigators
- Autonomous ships and operations



photo credit: Port of Stavanger

What has been done

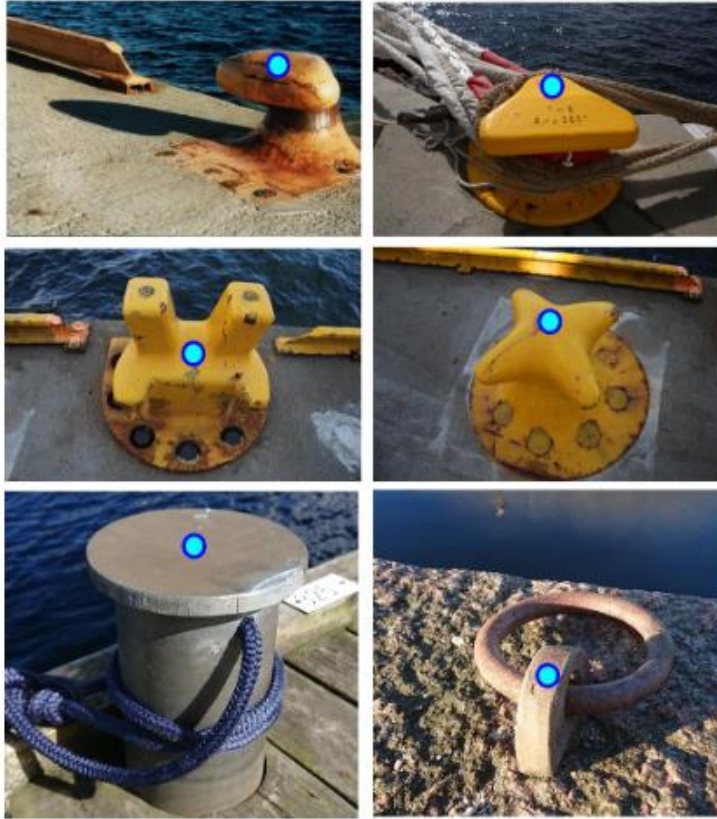
- National Port Standard
- Mapped 17 ports
- Registration instruction
- Development of digital infrastructure

- Outstanding work :
- Finish Product specification (norwegian/english)
- Mapping more ports
- Participation NIPWIG on development of international standard (S-131)



Photo credit: Port of Kristiansand

Registration instruction, example



Point cloud from mobile mapping

As a detailed basis to register
port objects

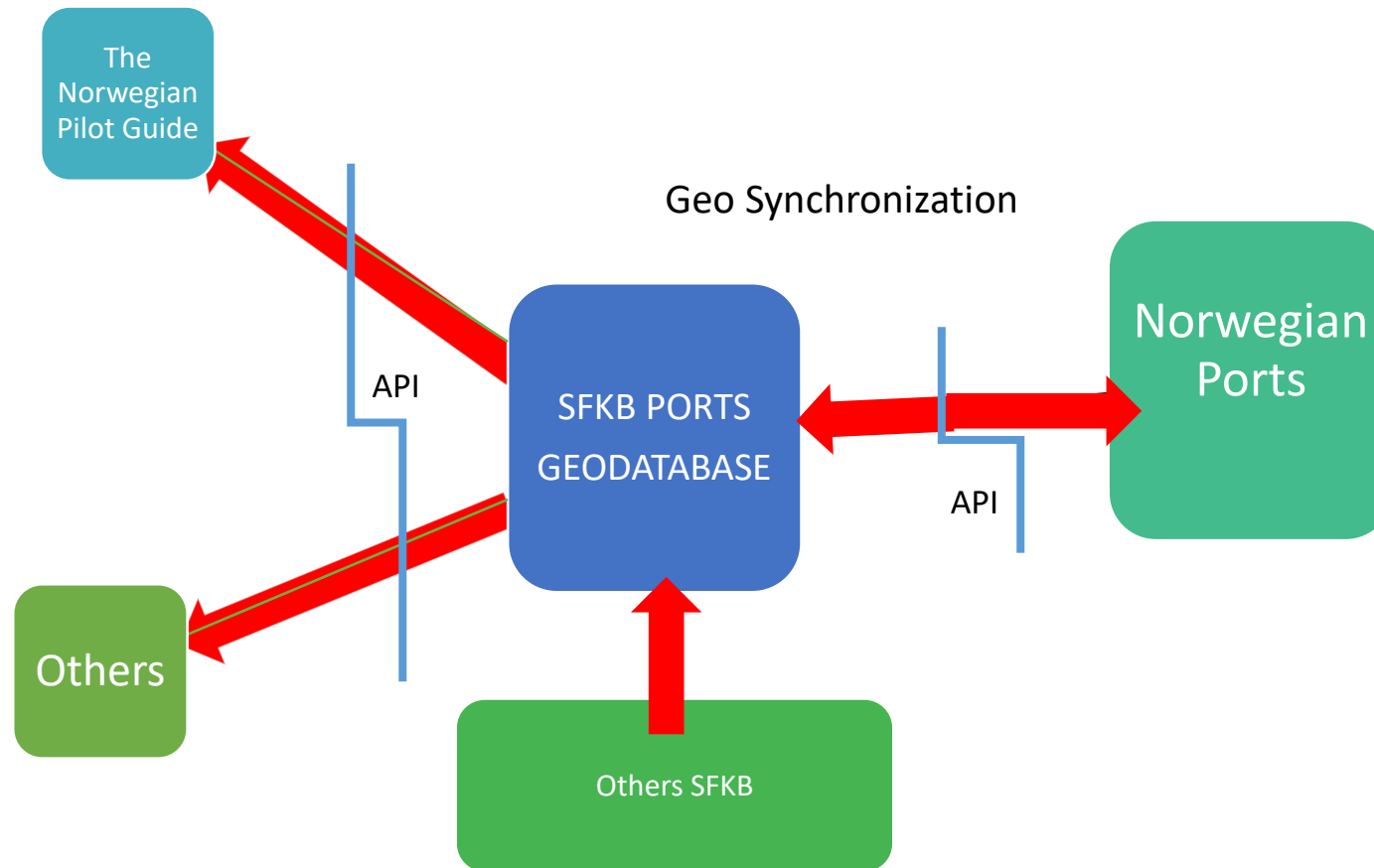


Ports in Norway

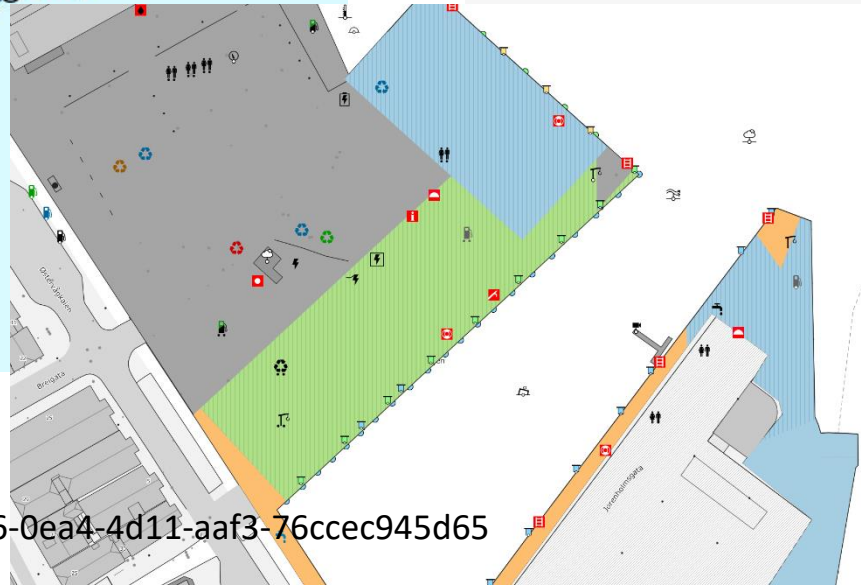
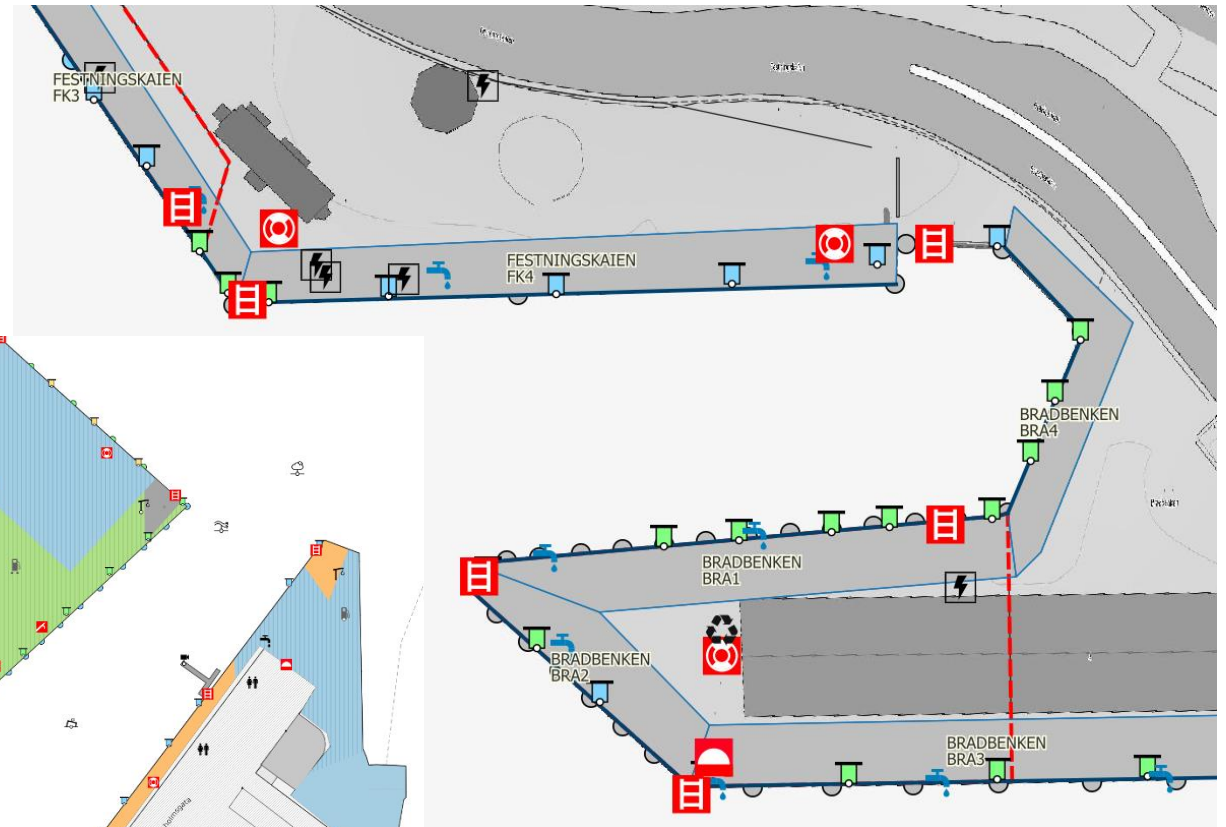
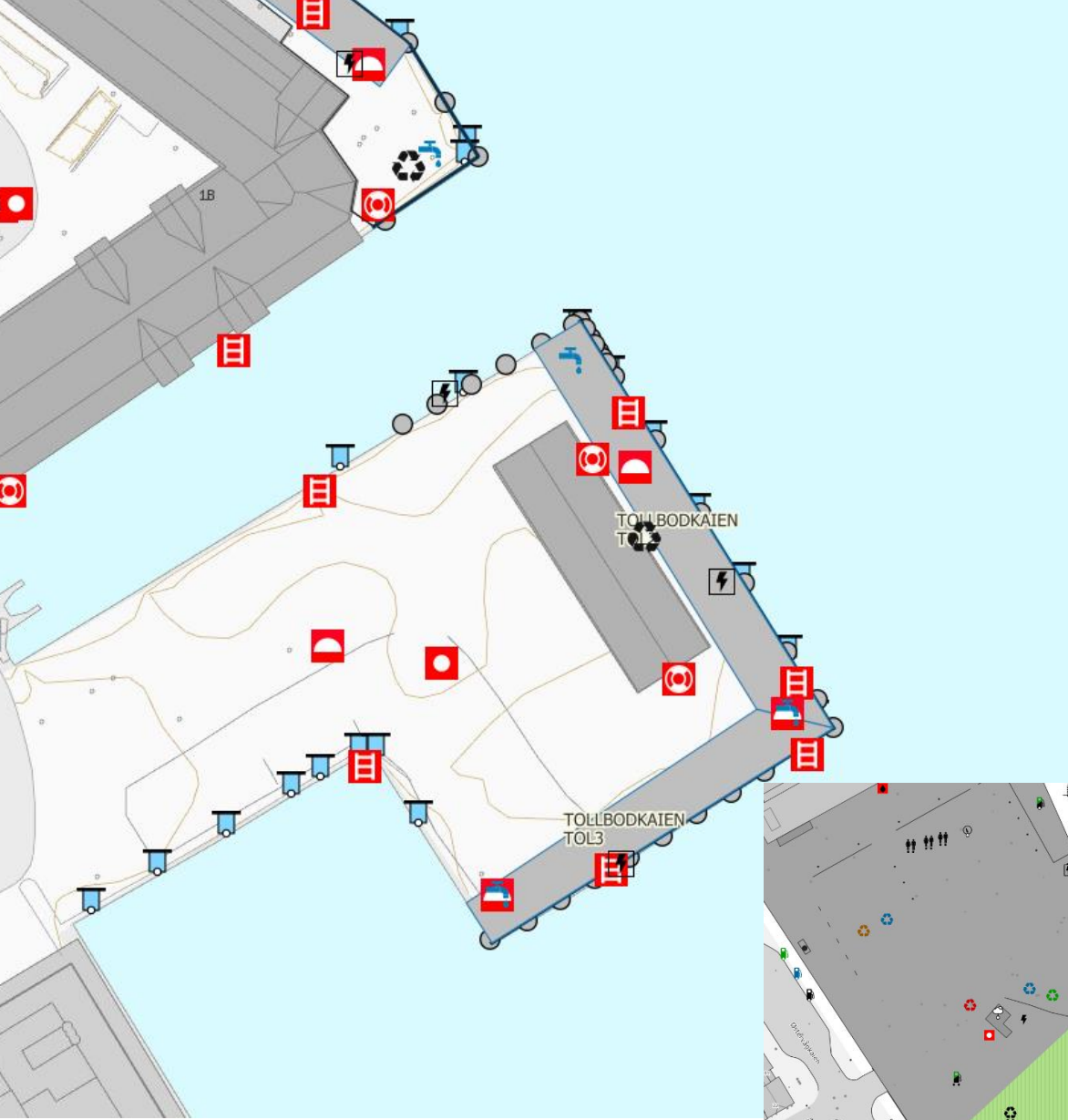
- Ca. 60 ports that are members of the interest organization Norske havner. Large and Professional ports.
- Ca. 622 ISPS (SNN) og 105 ISPS cruise ports. (Multiple in same port: two terminals in the same harbour area).
- Ca. 650 ports with UN/LOCODE. For some ports each terminal has its own code (Port of Stavanger has 3 UN/LOCODE: Risavika, Dusavika og Stavanger (Can also be a part of ISPS).
- Ca. 767 Fishing ports.
- Ca. 1500 ports that the NHS regard as important for leisure activities.
- 12 000 points relation waste disposal at ports and quays (Miljødirektoratets database), port can contain multiple points.
- Ca. 116 ferry connections, distributed on ca. 256 ports.

GeoSynchronization SFKB – PORTSGEODATABASE

(SFKB common map database)



Drawing rules



WMS-service:
<https://kartkatalog.geonorge.no/Metadata/6e0d1be6-0ea4-4d11-aaf3-76ccec945d65>

