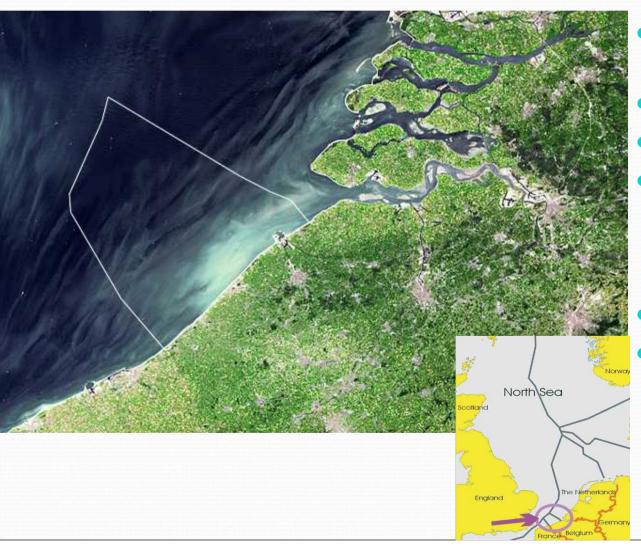
Monitoring Network Flemish Banks (Belgian Continental Shelf & Belgian Coast)

ir. Stephanie Van de vreken Flemish Hydrography 29/02/2012



Belgian Continental Shelf & Belgian Coast



- Shallow water & sandbanks
- Intense traffic
- Ports
- Limited depths for deep draught vessels (tidal windows)
- Coastal protection
- Activities: dredging, windmills,...



Hydrometeorological conditions & forecasts

Monitoring Network Flemish Banks

- Monitoring network at sea and along the coast
- Real-time data processing and distribution
- Forecasts of water levels and waves (hydrodynamic models)

Oceanographic Meteorological Station

Marine weather forecasts



Monitoring network Flemish Banks

Measuring piles (water level, waves, current, water & air temperature, wind, atmospheric pressure)



Tide gauges



Wave buoys

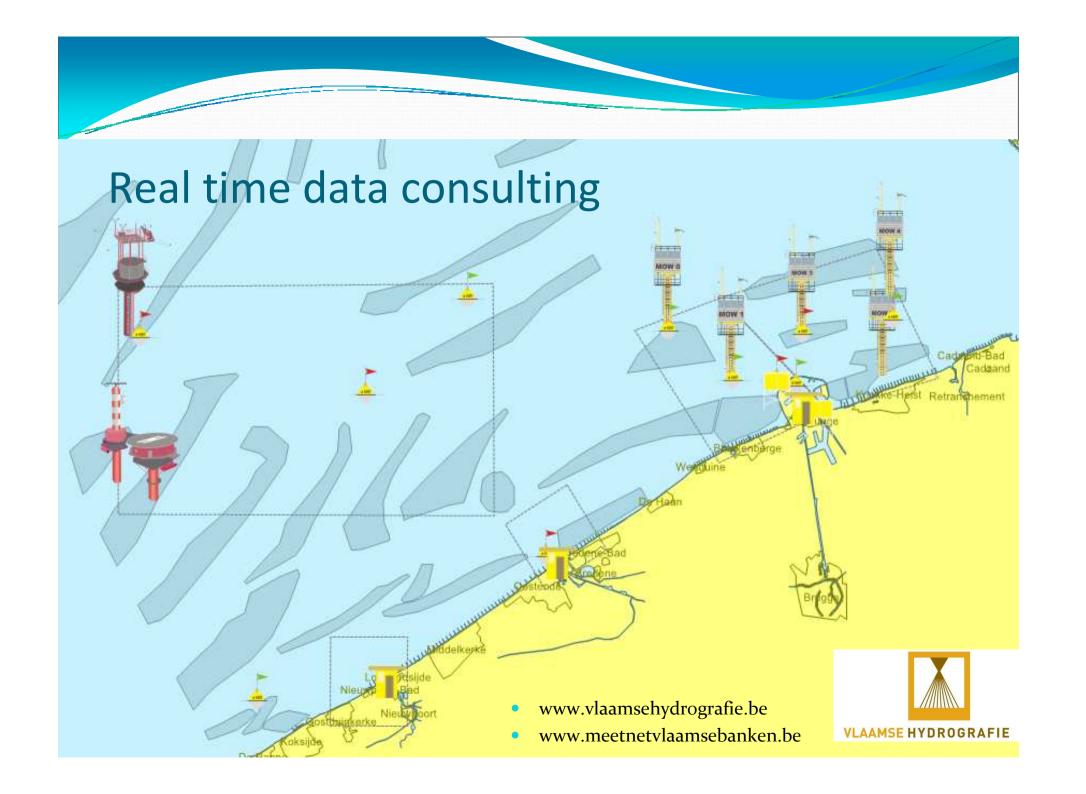


Meteorological stations









Real time data transmission & processing

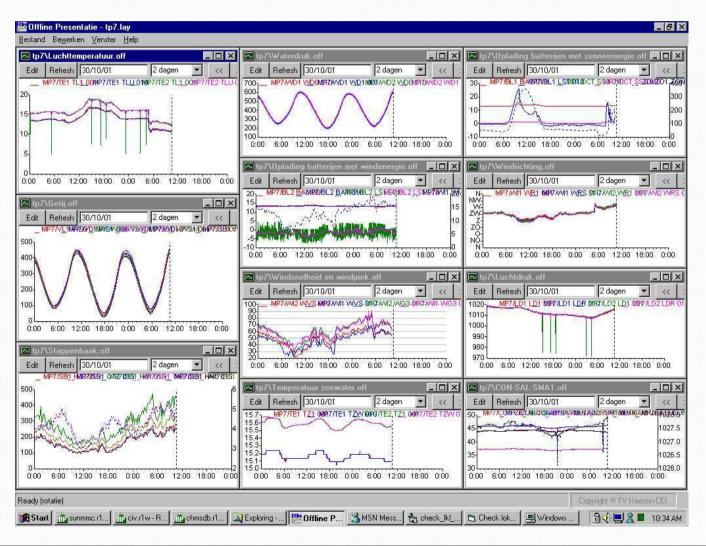








Quality control – storage - distribution





End products

- Real-time data
- Predictions resulting from hydrodynamic models
- Statistics
- Tide tables
- Tidal current atlas
- Storm tide predictions (Storm Surge Warning Service)
- ...



Oceanographic Meteorological Station (OMS)

- Marine meteorological forecasts (up to 5 days)
- 4 forecasts a day
- Input: real-time data Monitoring Network Flemish banks, weather radar, satellite images, ...
- Output distribution: e-mail, internet (www.kustweerbericht.be), Hymedis (Joint Dutch-Belgian project; pilots & maritime authority vessels)
- Special reports (storm,...)



End users (1)

Agency for Maritime and Coastal Services (MCS)

- •Flemish Pilotage Division
- •Fleet Division
- Shipping Assistance Division
- Coastal Division (storm tide predictions; coastal protection)



End users (2)

- other governmental agencies
- scientific world
- harbour masters
- commercial shipping industry
- pleasure cruising
- fishery
- consultancy firms
- private persons
- international partners



