



**5th GSE co-location meeting:
Information day**

- Portfolio of services focused on Marine and Coastal
- 5 main **downstream** service lines split in 2 domains
 - **Oil Spill**
 - Routine surveillance and alert
 - Drift forecasting
 - **Water Quality**
 - WQ monitoring
 - Algae Bloom monitoring and alert
 - WQ Assessment
- 1 **upstream** service line
 - **Metocean data** provision
- **Few figures**
 - 36 partners among which **28** deliver at least 1 service
 - **56** users from **16** different countries receive MarCoast services (signed SLA)
 - Around **15** new users are discussing new SLAs

- 6 Service Providers in Oil Spill, 16 in Water Quality and 6 in Metocean
- For **Oil Spill**, more an industrial offering
- For **Water Quality**, equal split between institutional and industrial offerings
- The number of SPs should not increase too much
 - MarCoast gather the key partners
 - New SPs from Portugal, Denmark and Greece are identified

■ Oil Spill

- Between 50 and 276 products are planned (one every 1.3 days in mean) per area
- Between ~50% and 100% of the users demand is satisfied

■ Water Quality

- 365 products per year are planned per area
- 100% of the users demand is satisfied but
 - More users would like to receive the services
 - Concerns only **reduced resolution** products

■ 18 users in Oil Spill, 30 in Water Quality, 8 in Metocean data

- Range from international body to national and regional users
- Oil Spill
 - **Coastguard agencies** are the main users
- Water Quality:
 - Users are in charge of operational **implementation of environmental policies** (WFD, ...) at national or regional level + EEA is interested ...

■ Service Level Agreement

- **OS**: 8 SLAs, among which 2 address several users with a good federating org.
- **WQ**: 1 SLA per user (i.e., 30 SLAs have been signed)
- Since KO, 19 new SLAs have been signed (2 for OS and 17 for WQ)
 - 4 with Denmark, 1 with Romania
- Around **15 new SLAs** are under negotiation
- Few SLAs not certain to be served (or at a reduced volume) due to budget constraints

User involvement in service configuration

Goal of services

- Fulfilment of user requirements

Current status

- Strong involvement of users in configuration of services:
 - Consolidated User Federation
 - User interests represented by expert group – User Executive Board (UEB)
 - Oil Spill User BfG in charge of Validation Bureau Oil Spill
- Exchange among new and existing users and with other MarCoast partners at dedicated workshops and user meetings
- Collaboration with service chains regarding e.g. harmonisation & standardisation on a concrete technical level (data, validation methods, feedback mechanisms)

Oil Spill Services 1/2

General feedback

- Good level of communication to Service Providers
- Fitness for purpose on an operational level:
 - Compliancy of services with SLA
 - Effective access to data
 - Suitable feedback possibilities (improving services)

Oil Spill Services 2/2

Improvements / perspectives

- Further enhance **reliability** of services and products
 - i.e. reduce false alarms / false negatives
- Better spatial and temporal **coverage** needed
- Ensure availability of satellite images
 - Minimise satellite **user conflicts** and **receiving failures**
- Clarify MarCoast / EMSA exchange to users
 - “ESA / EMSA Memorandum of Understanding”

Benefits identified by users

- Services **support aerial surveillance**
- **Increase of efficiency** due to satellite service expected
 - sustainable and reliable services needed

Water Quality Services 1/3

General feedback

- Communication to Service Providers ✓
- Fitness of services for purpose ✓
- Services support users ✓
- Use of satellite data is expected to increase (due to policy requirements, e.g. WFD)

Water Quality Services 2/3

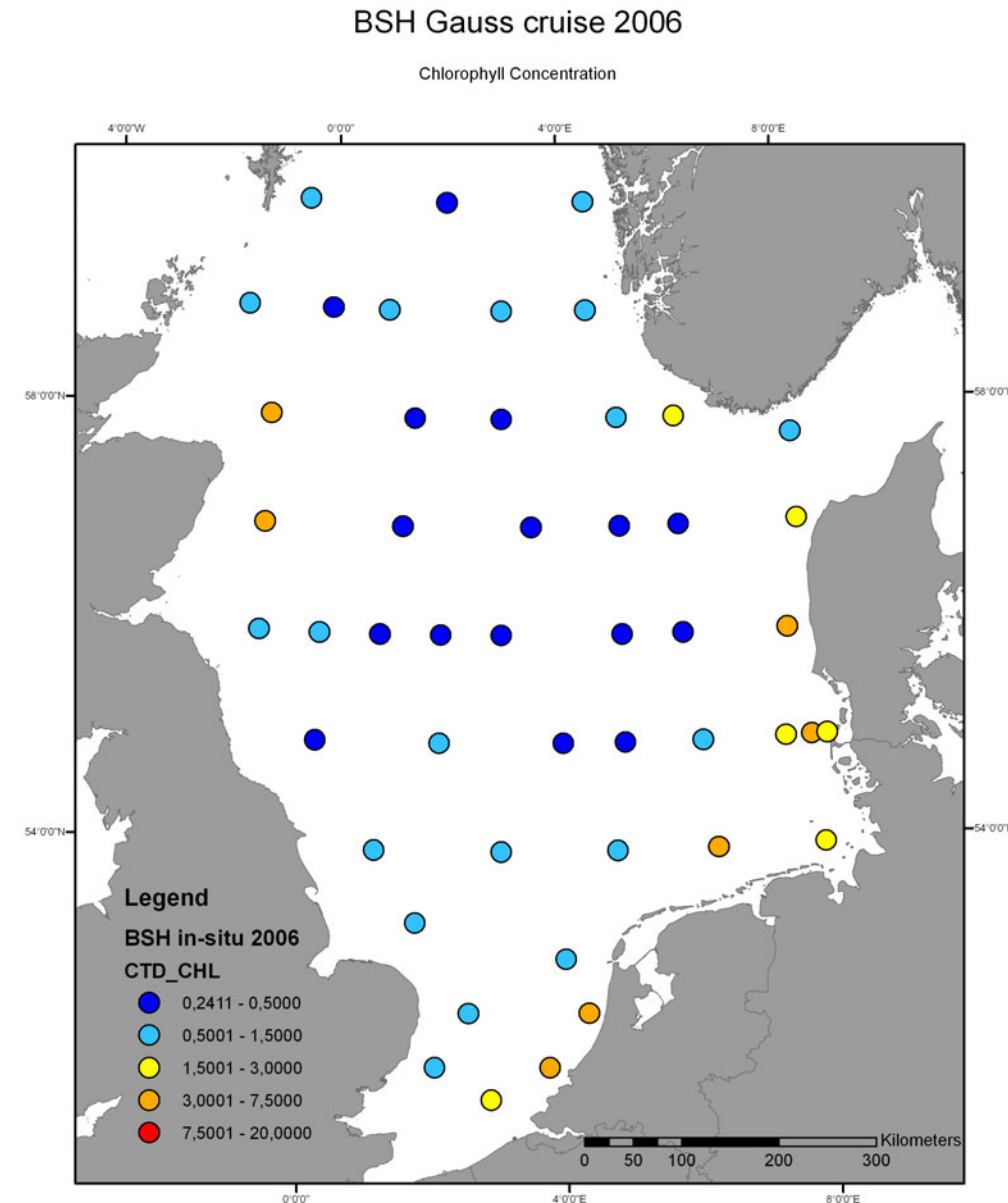
Improvements / perspectives

- Enhance **accuracy**
- Provide **higher resolution** of products (e.g. FR MERIS)
- Many users are very active in **validation**
 - e.g. in-situ time series (station data) available → usable for validation, if FR MERIS is provided
- Fill MERIS **gaps** by MODIS products
- Guarantee **long term continuity** of data provision (necessary to implement services operationally) with defined costs for satellite services (budget planning)

Water Quality Services 3/3

Benefits identified by users

- Spatial overview complementing in-situ point measurements
- Optimise in-situ expenditure

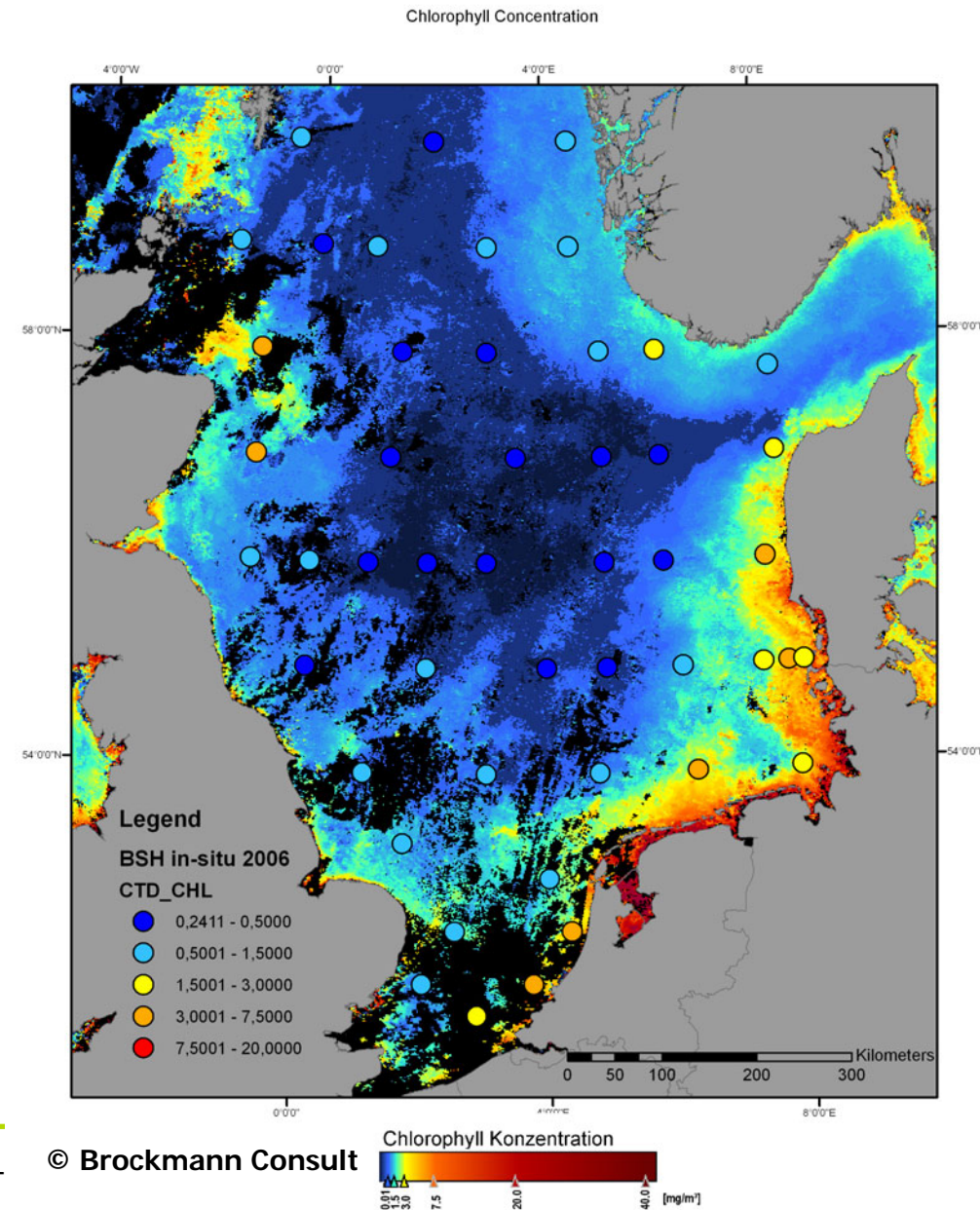


Water Quality Services 3/3

Benefits identified by users

- Spatial overview complementing in-situ point measurements
- Optimise in-situ expenditure

BSH Gauss cruise 2006 and MERIS MC product



■ Operational sustainability

- Critical observation data sources are
 - Oil Spill: ASAR and RSAT-1 → Sentinel-1 and RSAT-2
 - Water Quality: MERIS, MODIS, SeaWIFs → Sentinel-3
 - Metocean: Jason, RA-2, AATSR, ... → Sentinel-3 and Jason-2

■ Financial sustainability

- Oil Spill
 - North Sea users already pay a significantly part of the service cost, contrary to users from southern part of Europe
 - One pan-European user with a budget to undertake oil spill surveillance (EMSA)
- Water Quality
 - Users do not pay for the service today but there is a strong possibility of future user financial contributions
 - One pan-European user without a dedicated budget (EEA)

- MarCoast highlight the clear separation between core and downstream services
 - MarCoast Metocean data service line will be part of the MCS
 - For the Water Quality, the main services appear to be downstream services
 - For the Oil Spill, transition to EMSA management but maintain link with Marine Fast Track
- MarCoast is a (the?) place where interaction between MCS and downstream services can be anticipated
 - Integrated Ocean Colour service (led by ACRI-ST) that serve 11 intermediate users
 - Good example of interaction between upstream and downstream services

- **MarCoast services are presently delivered to national users in almost all coastal states**
- **Users are concerned about**
 - Service continuity
 - Service validation
 - Improved content
- **MarCoast services fit very well into Marine Fast Track**
 - Metocean data service line as core service
 - Water Quality as downstream service
 - Oil Spill under EMSA management
 - MCS end-to-end demonstration
 - Algae Bloom alert and indicators for EEA and HELCOM/OSPAR
 - Oil Spill Drift for EMSA
- **Main concern within MarCoast we have is the WQ service continuity**
 - Users cannot pay the totality of the cost
 - Under FP7 – Downstream call (not before 2/3 years) ?

Thank you!

