

Marine Fast Track Splinter Session

**MARCOAST
POLAR VIEW**

GSE Transfer to Marine FTS

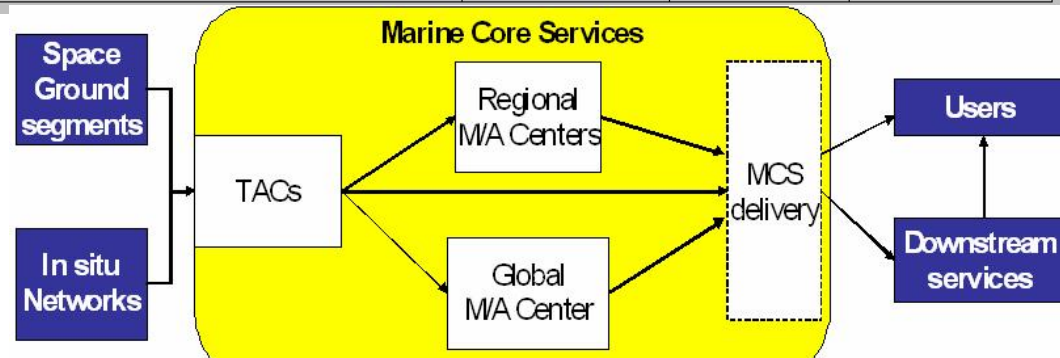
- MARCOAST**

- Oil pollution surveillance
- Oil spill drift forecasting
- Water Quality monitoring
- AB monitoring
- Water quality indicators
- Metocean data

- Polar View**

- High resolution sea ice
- Sea ice thickness charts
- Ice forecasting
- Global sea ice
- Iceberg detection
- Floe edge mapping
- River ice mapping
- Snow cover maps
- Glacier maps

Geophysical State Variable	Marine core products derived from observations	Marine core products derived from models	Products expected to be available by 2008
Sea level, sea surface height	✓	✓	✓
Temperature	✓	✓	✓
Salinity	✓	✓	✓
Currents	✓	✓	✓
Surface winds	✓	✓	✓
Surface waves	✓	✓	✓
Sea ice (extent, concentration, thickness, motion)	✓	✓	✓
Biophysical State Variable			
Attenuation of solar radiation – Note 4	✓		✓
Bio-geochemical State Variable			
Chlorophyll-a	✓	✓	✓
Dissolved inorganic nutrients	✓	✓	
Dissolved O ²	✓	✓	
pCO ²	✓		
Benthic biomass – Note 3	✓		
Sediment grain size & organic content	✓		
Faecal indicators - Note 1			
Oil slicks - Note 2			





- All MARCOAST products fit to either core or downstream:
 - Metocean line to MCS TACs
 - WQ/AB services use TAC output and provide downstream services
 - Oil spill migrates to EMSA management but link must be maintained with MFT
- All WQ/QB use the OC TAC:
 - Service performance must be maintained at present MARCOAST level
 - 20-30% of total service costs are contained in the OC data processing
 - free access to OC TAC data reduces funding requirement for downstream services
 - Downstream services require OC TAC to provide WLR as well as [Chl-a]
- For downstream services:
 - MARCOAST ends in October 2008. New WQ services must start by March 2009 to maintain user engagement and confidence
 - Indicators service cannot be maintained without available funding
 - Several users planning availability of operational budgets to partially cover service costs but these are not likely to be available for many users by 2008
 - FP7 Downstream Call would enable smooth transition to user financial contribution
 - This would not address cross validation between MARCOAST partners
 - Qualification of higher resolution WQ products (eg MERIS FR) is not addressed



- Polar view products within MFTS core or downstream:
 - Global sea ice as MCS TAC
 - High resolution sea ice, iceberg monitoring, ice forecast as downstream
- Polar View products not related to Marine FTS
 - Glacier and Snow Monitoring
 - River/Lake Ice & Floe Edge location
- For downstream services:
 - For sea ice, iceberg & ice forecast services, SAR data procurement currently represents ~40% of total service costs. If these costs are covered within GMES then post 2008 sustainability is easier:
 - Possibility of national ice services taking over PV Arctic sea ice services but at significant reduction in service volume
 - Full transition to national funding would require continued (partial) funding of services
 - Antarctic Services are not extension of current government agency mandate and will therefore cease unless continued finance is made available
 - Some services (river/lake ice, floe edge) are outside EU territory and should therefore be considered in the framework of GMES international cooperation



Issue:

- Downstream services call not until 2009
- Requirement for MCS call to include end-to-end service demonstrators

Proposal:

- Identification of potential end-to-end demonstrators illustrating MCS impact & benefits
- MARCOAST/Polar View represent existing pre-operational frameworks within which end-to-end demonstrators can be directly connected to legally mandated user organisations
- Consider both indicators/re-analysis and monitoring/forecasting

Demonstrators to be included

- **European extended indicators service:**
 - Eutrophication and SST indicator generation
 - address in EEA, Helcom and other secretariats as MCS users
- **Baltic Monitoring:**
 - Link MCS Baltic Module with MARCOAST WQ/oil spill drift services and Polar View Sea Ice Forecasting services (Sea ice includes Svalbard)
 - Same national users for WQ and sea ice products (eg BSH, FIMR)
 - addresses EMSA and HELCOM as well as national agencies as MCS users
 - Strong interest, in particular wrt oil spill in sea ice
- **Integrated oil/ice forecasting**
 - Link MCS forecast products with oil spill and iceberg detection service for improved evolution forecasting
 - addresses IIP and EMSA as MCS user