



World Meteorological Organization

Working together in weather, climate and water

Regional Capacities of NMHS in Forecasting of Marine and Coastal Hazards

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Sal, Cape Vert



Status of Marine Meteorological Services



Out of 17 NHMSs in North-West and Gulf of Guinea coastal countries ★

- **Two countries** issuing regularly bulletins/warnings for marine safety for few years ★
- **Two countries** started in October 2010 ★
- **One country** in the process ★

Tools:

Marine observations: *only « ships »*

Atmospheric models and observations from various sources *as for a weather bulletin*

Wave models outputs from various sources:

Maroc (collaboration), Meteo-France (RETIM), FNMOC, NOAA/NCEP, ECMWF, etc through INTERNET,

Coupled ocean-atmosphere models: *e.g. FNMOC*

Bulletins mainly issued for 24 hrs lead time



Regional approach in the West Africa

Key issues:

- Availability of marine meteorology products (e.g., ECMWF, NOAA, AEMET)
- Requirements of the different models & forecasting methodologies
- Accessibility of observations and gap analysis
- Capacity building schemas



Observations and Monitoring

Need for Strengthening of the observation and monitoring capacities through:

National

- **Development** of bathymetric survey and databases
- **Establishment** of an appropriate coastal and offshore observation network

Regional

- Complete the network of buoys and tidal gauges for sea-level and sea observations
- Improvement of **regional sharing of observation data**



Marine Forecasting

Need for strengthening of forecasting capacities through:

National

- **Improvement of local forecasting models** for marine related hazards
- **Training & replacement of forecasters** at retirement age
- Coordinating and creating **communication platforms** between the maritime agencies and the NMHS
- **Dissemination** of information through disaster management agencies and user communities on the coastal zone (i.e., port authorities, fisheries, etc..)



Marine Forecasting

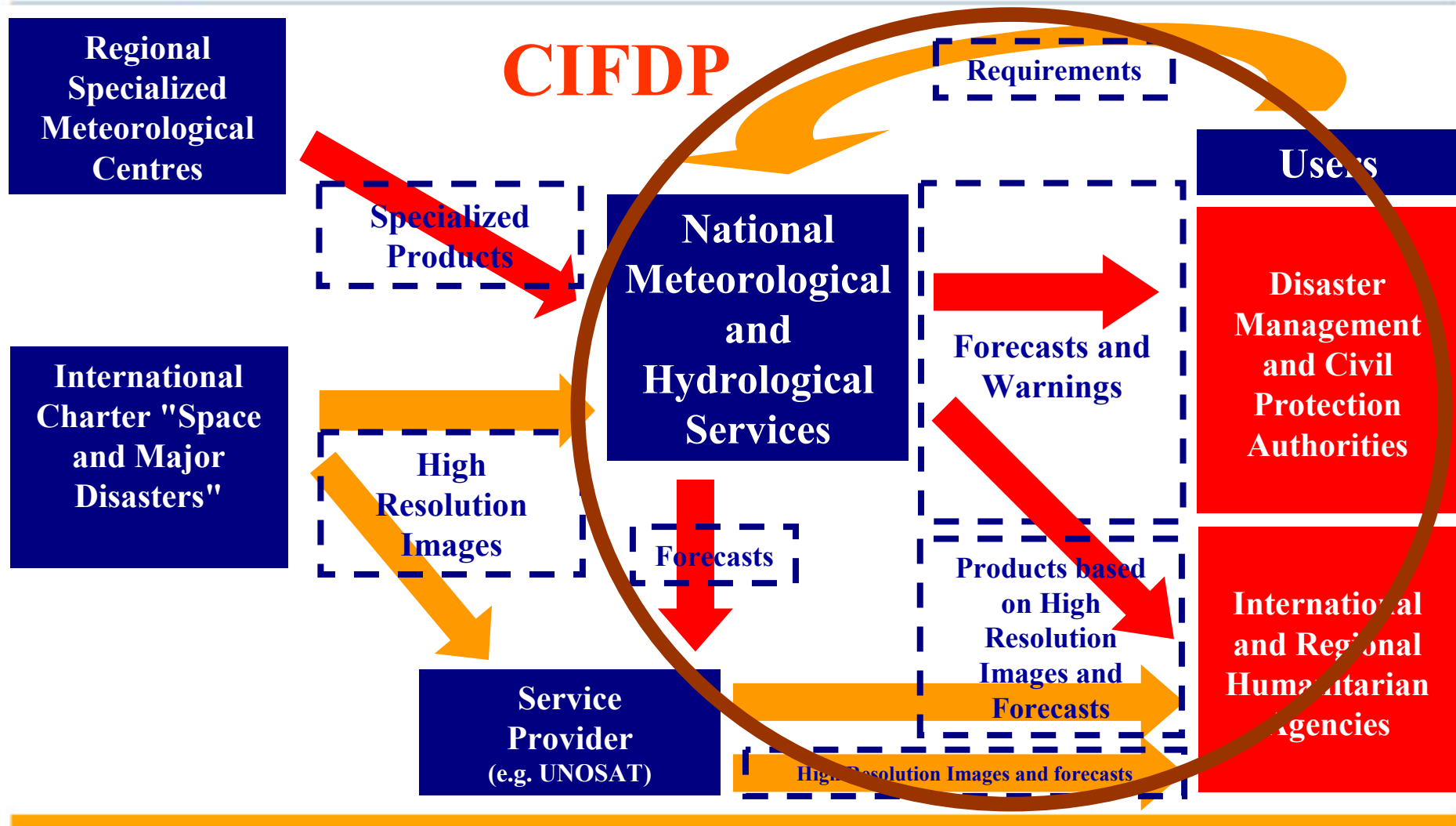
Strengthening forecasting & coordination capacities:

Regional

- **Development & improvement** of the storm surges & wind waves warning systems
- **Strengthening the role of regional centers** to develop coordination mechanisms on marine hazards
- **Identify national focal points** for coastal & marine hazards & capacity development through a **Regional Training Center**



Coastal Inundation Forecasting Demonstration Project (CIFDP)





Thank you!

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