



# Marine Disasters

## Extension of the IHO framework



# Background

## IHO Resolution 1/2005 'IHO response to disasters' (former K4.5)

→ outlines the appropriate **procedures and guidelines** to enable an **immediate and appropriate response** to any future disaster affecting coastal areas of the world.

## XVIIIth IHC (April 2012 – Monaco)

→ JPN Proposal to improve the IHO response to disasters.

→ IHB CL 73/2012 & CL 94/2012 => 1/2005 amended accordingly.

## IRCC04 (June 2012 – Singapore)

→ **IRCC4 09/2013**: « contribute to **improving the framework of IHO response to marine disasters** ».



# IHO response to disasters framework

*Actual resolution 1/2005 as amended **only focuses** on the situation **after** the **occurrence** of such severe disasters.*



What about being involved  
**prior** those disasters occurs?

# Disasters Warning systems

- In order to be efficient, tsunami & inundation warning systems are to be designated at the **scale of a basin**, beyond national boundaries.
- **Tidal data** are very relevant for improving the efficiency of warning systems (tsunami) and forecasting systems ( storm surge).
- It is of great importance to **share those data accross boundaries**.



**UNESCO encourages coastal States to transmit their near-real time sea level data, made available on the IOC Sea Level Station Monitoring Facility web portal.**

# HO responsibility VS Marine disasters

*Most of Coastal States HOs are at least involved in continuous tidal measurements as for:*

- *Tidal prediction activities*
- *Hydrographic surveys*

***But...***

*Usual requirements differ:*

*HOs current sampling rate = 15min up to 1h*

*Tsunami sampling rate = 1min*



→ ***Mostly considered from a national perspective only.***

## Refmar Days (Paris, June 17th-21st 2013)

→ **Named after the FR reference tidal observations network managed by SHOM.**

Through Refmar, SHOM fulfils various coordination functions so as to promote the use of data in a **wide range of applications**, such as tsunami and inundation warning systems.

→ **First conference bringing data producers and users of water heights together.**

→ **Foreign countries participation (Algeria, Morocco, UK, Spain, Portugal, Romania, Tunisia, Guinea, Cote d'Ivoire) + UNESCO representative**

→ **Discussions on sea-level changing, warning and risk prevention by submersion systems**

**=> Real Perspectives of cooperation in the region.**

# Extension of the IHO framework: Proposal

## IRCC5 (Wollogong – June 2013)

→ *FR proposal submitted.*

→ *Encourages coastal States to:*

- *collect relevant data in their area of interest,*
- *Make data available to improve tsunami warning systems,*
- *cooperate and support the IOC Tsunami Warning Programme by setting up near-real time transmission from their sea-level and tide gauges network.*



# Action required to MACHC

→ The MACHC is invited to:

- **MACHC14-XX**: MACHC members to support that proposal of amendment of resolution 1/2005 to include prevention and alert systems.
- **MACHC14-XXX**: to support IOC in developing access to Real Time sea level data level information required by alert systems.

