



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 coordination on those topics.**

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 SAIHC

→ The SAIHC is invited to:

- **SAIHC10-XX**: SAIHC members to support that proposal of amendment of resolution 1/2005 to include prevention and alert systems.
- **SAIHC10-XXX**: to improving the co-ordination with the IOC tsunami programme of work within the region.

