INTERNATIONAL HYDROGRAPHIC ORGANIZATION

ORGANISATION HYDROGRAPHIQUE INTERNATIONALE

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CIRCULAR LETTER 20/2012
16 February 2012

IHO RESOLUTION 6/1932, AS AMENDED, ON THE "STUDY OF MEAN SEA LEVEL"

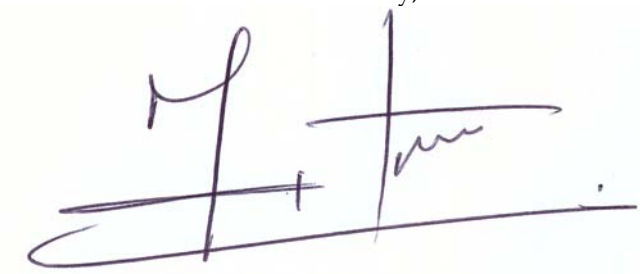
Reference: IHB CL 81/2011 dated 13 December

Dear Hydrographer,

1 The IHB would like to thank the 41 Member States who replied to the reference: Argentina, Australia, Bangladesh, Belgium, Brazil, Canada, Chile, Colombia, Croatia, Cyprus, Ecuador, Estonia, Finland, France, Germany, Greece, Guatemala, Iceland, India, Ireland, Italy, Japan, Korea Rep of, Mexico, Morocco, New Zealand, Norway, Oman, Papua New Guinea, Peru, Poland, Qatar, South Africa, Spain, Suriname, Tonga, Tunisia, Turkey, Ukraine, United Kingdom, and the United States. All 41 Member States supported the amended resolution. Six Member States provided comments which are attached at Annex A together with IHB comments where appropriate. The amended text of resolution 6/1932, as amended, is attached at Annex B.

2 There are currently 80 IHO Member States with two States suspended. Therefore in accordance with paragraph 6 of Article VI of the Convention on the IHO, the majority required for adoption of the amended resolution is 40. 41 positive responses have been received, therefore the resolution is adopted and will be included in IHO Publication M-3, *Resolutions of the IHO*.

On behalf of the Directing Committee
Yours sincerely,



Vice Admiral Alexandros MARATOS
President

Annex A: Comments by Member States;
Annex B: New text of resolution 6/1932, as amended.

Canada:

Canada agrees that 40 years is an ideal term cycle for the prediction of mean sea level. At the same time, we recognize that this term may seem daunting to some Member States and that any systematic approach to obtaining tidal records brings value and should be encouraged.

Comment by the IHB: *Noted.*

Chile:

SHOA doesn't have any inconvenience to support the amendment of IHO Resolution 6/1932, since tidal observations of 40 years or longer are important in the study of mean sea level.

Comment by the IHB: *Noted.*

Colombia: Colombia supports this change and asks in advance for advice on this subject, as they hold heights' measurements data without being able to establish the different tidal datums.

Comment by the IHB: *The IHB will pass the request on to members of the TWLWG.*

France:

France would like to thank members of the TWLWG for the work carried out on the questions concerning the Study of Mean Sea Level.

After investigation France notes:

- There is a debate going on within the scientific community on the minimal length of observation which is still not agreed upon.
- The choice of 37 years is criticised by Douglas (Journal of Geophysical Research, Vol 96, N° C 4, pages 6981-6992, April 15, 1991), who prefers a length of 60 years.
- That GLOSS recommends 40-60 years
- That 40 years is a minimum duration compatible with the « scale » of time of the institutes which have the responsibility in the Observation of the Sea level.

Therefore, France suggests to modify the proposal to read « …. records of typically at least 40 years and up to 60 years or more"

Comment by the IHB: The points reported by France are noted. The TWLWG in debating this point considered that, as mentioned by France 40 years was the minimum period recommended by GLOSS but preferred to leave the upper limit open.

Mexico:

There is no inconvenience in making the data available.

Comment by the IHB: *Noted.*

Peru:

Concerning this subject, this Directorate agrees with it, as it is mentioned in the presentation made by Commander Walter FLORES, who attended the 3rd Meeting of the Tidal and Water Level Working Group (TWLWG), held in April 2011, in Jeju Island – Republic of Korea, where he mentioned the national progress made concerning tidal issues and reviewed the action lines of the TWLWG2 and the IHO Resolutions.

We agree that the increase of the mean sea level is one of the main indicators of the climate change and its direct consequences are the erosion and the flooding of the coastal areas, the backward movement of the coastline, the loss both of infrastructure and usable terrestrial areas, the damage to the ecosystems, etc. In this sense, it is necessary to rely on long term records (40 to 60 years), that will enable us to know the increase rate and the acceleration of the change in the sea level. The inclusion of such information in the global climate models will allow the improvement of the oceans' management and will corroborate the foreseen estimations of the changes, mitigating thus its effects.

This Directorate is doing research surveys on the levels of the sea, from records greater than 68 years. Such analysis shows a clear trend towards rises in sea level, with more significant rises during the strong magnitude "Niño" periods. This assists in determining the maximum flooding zone in the case of a rise of the sea level as anticipated by the Intergovernmental Panel on Climate Change (IPCC).

Likewise, this Directorate participates globally in the information exchange on tides with the institutions devoted to the Global Observation and Monitoring of the Sea Level (GLOSS, PSMSL, JASL-UHSLC).

Comment by the IHB: *Noted.*

STUDY OF MEAN SEA LEVEL	6/1932 as amended	20/2012	A6.5

1 It is recommended that the IHB encourage Member States to carry out systematic, long-term tidal observations, records of typically 40 years or longer, in view of the importance of monthly and secular variations of mean sea level in connection with tidal prediction.

2 It is recommended that Member States make such data available for publication by the Permanent Service for Mean Sea Level of the International Council of Scientific Unions, since that service publishes regular monthly and annual values of mean sea level for tidal stations throughout the world.