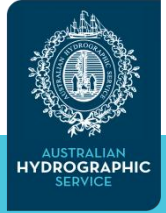




Australian Government
Department of Defence



Hydrographic and METOC Branch

TWCWG 3 S-104 Update

Zarina Jayaswal
Australian Hydrographic Office
Deputy Director Tides and Geodetic Control

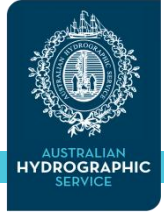
How did we get here?



- The desire for tides in ECDIS has been requested when ENC were first introduced.
- 1st TWLWG meeting held in 2009 was the first meeting to openly discuss the issues of “dynamic tides in ECDIS” and tidal data aware ENC’s with TSMAD to considering impact for S-101
- S100 1.0 was published in 2010, paving the way for new product specs to be built upon it.
- Feb 2015 saw the first draft version of S-104 released prior to the April 2015 meeting.



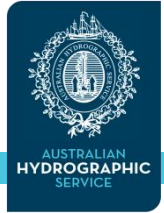
Where to next?



- **S-129 WG Feedback**
- **S-100 WG Review**
- **Influence polygons**
- **Test data**



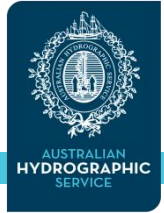
S-129 Feedback



- **All three proposed models (single point, gridded data, zones of influence) have their place. The most appropriate model depends on the complexity of the tidal regime (and thus the UKC calculation) in a given area. In a simple case or small area, a single point might suffice whereas in an area like the Torres Strait this is clearly inappropriate.**
- **It is important that the adopted tidal model matches as close as practically possible to the tidal model used to produce the ENC**
- **Enforcing identical CRS and vertical reference frame with S-102**
- **Ensuring same tidal model used for both S-104 and UKCM**
- **Mismatches in water levels used in a UKCM system vs. broadcast by S-104. How will both product specifications address this?**



S-100 WG Review



- S-100 WG had all developing specifications reviewed for compliance with S-100.
- This review was done after the release of version 3 in April 2017.
- All comments were placed in version 0.0.5 unless the change was a simple editorial correction.



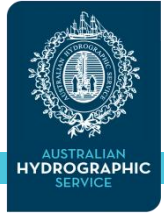
Influence Polygons



- what do we mean by them
- what additional information do we need to describe them



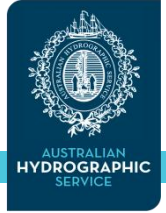
Influence Polygons - Cont



- **Scenario 1: a polygon with tidal station somewhere within it.**
- **Scenario 2: Channel with sub regions – linear relationship between two tidal stations (eg berth and channel entrance)**
- **Scenario 3: Co-tidal**



Test Data



- **What is HDF5?**
- **Who currently has the skills to create?**
- **How, when and where are test undertaken**
 - Are test scripts required?
- **Learning from the results of the tests to feed back into S-10.**

