

Science Mission Requirements for Global Class Vessel(s)

FIC Meeting, 9 July 2018

Committee

- Greg Cutter (chair)
- Byron Blomquist
- Suzanne Carbotte
- Clare Reimers
- Jim Swift
- And now, Zoltan Kelety

Tasks – Establish/define science drivers

- Fleet Improvement Plan
- Evaluation of existing fleet – service life, scheduling, costs
- Existing and future large-individual program needs
- Agency needs and funding

Tasks – Data gathering *continued*

- Survey the community and open discussions like having Town Halls

Survey last 5 years of Global Class users – DONE

41 responses; 70% senior scientists; 41% PO, 29% MG&G, 20% BO, 12% CO; mainly specific detailed comments (e.g., cable trays, ROV ops), but deck apportionment (foredeck vs. fantail) was notable and aerial vehicles handling mentioned

Town Hall at 2018 Ocean Science Meeting – DONE

Room was full, so 75+ attendees (had signup list); presentations covered SMR process, overview of this committee's tasks and time line; open discussion thereafter – acoustics (bubbles, drop keel), get agencies involved, involve early career, telepresence/bandwidth, coring ops, berths, lab container placement, keep process open and accessible

Tasks – Data gathering *continued*

- Survey the community *continued*

Survey entire community – DONE

118 responses, with some highlights:

- 44% responses from senior scientists, 19% mid career, 17% early career, and rest were graduate students and technicians
- 92% have used globals and will need to in the future
- Discipline breakdown (broadly defined) for respondents: 12% biological oceanography, 17% chemical, 10% physical, 9% climate, and 36% seismology/geophysics. NOTE: this breakdown is rather surprising, but it seems the retirement of the Langseth resulted in a disproportionate response from its community of users
- Berthing for 36 scientists sufficient: 88% yes
- Existing lab and deck space sufficient: 75% yes
- Existing scientific support instrumentation and systems (sensors, ADCP, CTD, etc.) sufficient: 50% yes, 36% no

Tasks – Data gathering *continued*

- Survey the community *continued*

Survey entire community – DONE

118 responses, with some highlights:

- What else is needed for broad support? Lots of varied responses, but majority asking for the facilities like those on Langseth, plus long coring, and better/quieter hull sensors; some requests for better ROV systems
- Are network and technical systems (e.g., broad band) on existing ships sufficient now and into future: 52% yes, 36% no NOTE: these responses are surprising, everyone complains about networks and high seas broadband
- Are overboarding systems (A frames, etc) sufficient: 71% yes, 26% no. Written comments regarding long coring systems
- Are handling characteristics of existing ships (e.g., dynamic positioning; operations as a function of sea state) sufficient: 72% yes, 13% no

Tasks – Data gathering *continued*

- Survey the community *continued*

Survey ship's captains and chief engineers

Based on these, draft SMR

Revised Timeline, Ver. 2.0

June 2017	Start process – define science drivers and gather data
Dec 2017	Survey past Global users
Feb-Mar 2018	Open to community: UNOLS web site, email announcement Town Hall at 2018 OSM
Aug 2018	Survey existing Global captains and engineers
Dec 2018	Draft initial/strawperson SMR and circulate to FIC
Jan 2019	Circulate SMR to Council
Mar 2019	Compile all inputs and create “living” SMR, start marketing