

Invitation to the ICES Working Group on Fisheries Acoustics Science and Technology April 2012 meeting.

Dear colleagues,

I would like to bring your attention to the next WGFASST meeting that will be held at the Ifremer Center, Brest, France from 9:00 hrs Tuesday 24th April 2012 to 17:00 hrs Friday 27th April 2012.

Note that the dates have changed from the dates agreed upon at the WGFASST meeting in Reykjavik. The study Group on Calibration of Acoustic Instruments in Fisheries Science will meet 9:00-17:00 Monday May 23rd 2012. Further practical details (hotels, venue etc) will be available from the host webpage: <http://wwz.ifremer.fr/wgfast2012/>

To register for the meeting and to make a contribution to the discussion topics, go to <https://www.imr.no/conferences/WGFASST> by 25 March 2011.

The main meeting of FAST will concentrate on presentations and discussions (~20 min.) within these topics (c.f. the WGFASST Report 2011, Annex 4, <http://www.ices.dk/reports/SSGESST/2011/WGFASST11.pdf>)

- a) In response to the ICES strategic plan 200–2013, WGFASST will document how acoustic and complementary methods will contribute to the goals of an ecosystem approach with benthic and pelagic observations to improve assessment and management of living marine resources, understanding mechanisms and processes of change and stability, and parameterize and evaluate models of ecosystem structure and function.
 - i) Ecosystem approach to fisheries management: metrics, indices and indicators. Provide methods and standards for creating and validating indicators and metrics derived from acoustic and complementary methods. Contributions addressing how acoustic metrics can be used to inform models and metrics addressing the effects of marine spatial planning, including marine protected areas are encouraged. Evaluate and compare a range of suitable metrics in empirical situations and by simulation, and data archaeology establishing long time-series of acoustic data are believed to be a key to make progress. (presentation session, Verena M. Trenkel)
 - ii) Design, implementation and review of observing systems. Integrating acoustic and complementary technologies to meet national and international goals for ecosystem based marine management. (presentation session, Yvan Simard/John Horne)
 - iii) Acoustic properties of marine organisms. Update on models and measures of target strength for classifying and enumerating living marine resources and associated variability of validating results. The use of multibeam sonars emphasize the need for addressing the dependence of beam inclinations from several inclinations as opposed to the traditional vertical approach and needs to be addressed (Presentation session, Egil Ona).
 - iv) Behaviour. Characterization of animal behaviour in order to 1) describe measurement uncertainty when using acoustic and complementary survey technologies and 2) measure the behaviour of marine organisms for ecological studies. There is a particular need to quantify behavioural disturbance in response to acute and chronic stimuli,

- including anthropogenic noise effects on marine animals (addressing GES descriptor 11) in order to characterize impact on ecosystem processes. (Presentation session, Alex De Robertis)
- v) Emerging technologies, methodologies, and protocols in single and multispecies surveys and end-to-end ecosystem models, including error structures and error budget modelling. (Presentation session, Richard O'Driscoll)
 - b) Based on our use of active sound in the ocean there is a need to review and document its footprint and place this in context with other natural and anthropogenic sources and the relative impact on marine biota. We will present a paper in the "Behaviour" session where the time, volume and levels will be addressed (Rudy Kloser).
 - c) Review the reports and receive updates from:
 - i) Study Group on Calibration of Acoustic Equipment (SGCal; David Demer).
 - ii) Topic Group on metadata standards (Tim Ryan).
 - iii) Engagement with SPRFMO (Francois Gerlotto).
 - iv) Observatories publication topic group (John Horne)

During the FAST meeting, time will be available for presentations and discussions on general interest topics including the report of the SCICOM Steering Group on Ecosystem Surveys Science and Technology (SSGESST) and how it influences future FAST research topics. WGFAST business including recommendations for the WGFAST 2011 meeting, ICES ASC topics are scheduled for discussion during the meeting.

Presentation by participants of either completed work or work in progress is encouraged for all sessions. Each terms of reference area will be summarized by the session chairs and time will be allocated to synthesis and discuss status and future directions.

As usual the meeting is also designed to help stimulate discussion with colleagues, contemplate joint projects and explore new developments and applications in applying advanced survey technologies to ecosystem based fisheries management needs.

kind regards,

Nils Olav Handegard
WGFAST Chair