

2011/2/SSGESST13 The Study Group on Turned 90° Codend Selectivity, focusing on Baltic Cod Selectivity (SGTCOD), chaired by Bent Herrmann, Norway and Waldemar Moderhak, Poland, will meet in Rostock, Germany, 7–8 October 2013 to:

- a) Evaluate the effect of turning diamond netting by 90° (T90) on codend selectivity;
- b) Improve knowledge of the size selection processes in T90 codends compared to T0 codends (normal direction of diamond netting) and BACOMA codends;
- c) Attempt to quantify the magnitudes of the effects of different factors (construction, generic netting properties, stock specific morphology, catch composition);
- d) Develop a guide on T90 codend construction with respect to size selection properties and optimal construction;
- e) Compare the selective properties of T90 codends with those of the other legal designs in the fishery targeting Baltic cod;
- f) Review available data on fish survival and in particular cod escaping from T90 codends;
- g) Investigate the escapement of fish during different states of the fishing process from T90 and BACOMA codends;
- h) Prepare a written report which summarizes the findings of the SG and provides clear recommendations regarding appropriate and inappropriate use of T90 codends.

This will be the final meeting of SGTCOD.

SGTCOD will report by 1 December 2013 (via SSGESST) for the attention of SCICOM and ACOM.

Supporting Information

Priority	The current activities of this Group will lead ICES into issues related to the effectiveness of technical measures to change size selectivity and fishing mortality rates. Consequently these activities are considered to have a very high priority
Scientific justification and relation to action plan	<p>The use of T90 codends is legal in the Baltic Sea cod fishery and there is an increasing global interest in using T90 for towed fishing gears. The basic mechanisms governing T90 performance are, however, not well understood or quantified.</p> <p>In order to address this it is proposed to set up a Study Group specifically to look at all issues relating to the use of T90 netting as a means of improving selectivity. The objectives will be reached by combining field experiments (size selectivity experiments), laboratory experiments with nettings (loading by different forces comparing mesh openness), laboratory experiments with fish morphology specific on Baltic cod (FISHSELECT) and theoretical approach (structural mechanic for bending of mesh bars under load and computer simulations). A case study on Baltic cod will be conducted.</p> <p>We expect that the benefit of T90 on size selectivity will depend on the netting panel construction (twine thickness, twine stiffness, single/double twine, ratio between mesh sizes (mesh bar)/twine thickness). Therefore all T90 experiments should be evaluated against a baseline of experiments with similar diamond mesh codends (T0) made of the same netting and having the same number of meshes around. For the comparison of results</p>

	from sea trials regarding the performance of T90 it is important that the trawl designs in front of the codends (T0 and T90) are identical. It is also important that the experimental design think about potential confounding effects like vessel size. The level of unaccounted mortality of cod escaping through T90 codends will also be considered specifically for the Baltic.
Resource requirements	The research programmes, which provide the main input to this group, are already underway, and resources are already committed. The additional resource required to undertake additional activities in the framework of this group is negligible.
Participants	The Study Group is likely to attract 10–15 participants from Baltic countries and a further 5 experts in the field.
Secretariat facilities	None.
Financial	No financial implications.
Linkages to advisory committees	ACOM
Linkages to other committees or groups	There is a very close working relationship with all the groups of the WGFTFB and many ACOM EGs. It is also very relevant to the Working Group on Ecosystem Effects of Fisheries and Baltic Fisheries Committee
Linkages to other organizations	The work of this group is closely aligned with the EU and Baltic Sea Regional Advisory Council.