15 January 2016

Data call: VMS/Log book data for fishing activities in the North East Atlantic and Baltic Sea for the provision of ICES management advice, in support of OSPAR and HELCOM, on the spatial distribution and impact of fisheries 2009 to 2015.

Rationale:
The rationale for the call is that ICES, with OSPAR and HELCOM, share the mission of advising on the environmental impacts of fishing and the use of space in the North East Atlantic and Baltic Sea. This call reconciles the need for a rational approach to the cost of extracting and submitting the data by the states across the two regions.
VMS data from vessels, coupled with log book data, is currently the most practical and cost-effective way to describe the spatial dynamics of fishing activities.

What the requested information will be used for:
ICES will use submitted VMS/Log book data to address the development of advice in 2016, addressing an OSPAR request (2016/1), HELCOM needs to evaluate the spatial and temporal effects of fishing, and an EC and NEAFC request on mapping the location of habitats sensitive to particular fishing activities (i.e. Vulnerable Marine Ecosystems, VMEs). It will also be used to map the aggregated distribution of fishing by different gear types across the OSPAR and HELCOM area.

Temporal and Geographical scope:
VMS anonymized data on fishing activities from 2009 to 2015 of fleets in all OSPAR areas I-V according to the OSPAR definition (ref. map: http://ices.dk/marine-data/maps/Documents/OSPAR_Boundary.pdf) including in Areas Beyond National Jurisdiction (ABNJ) and Baltic Sea according to the HELCOM definition (ref. http://ices.dk/marine-data/maps/Documents/HELCOM%20sub-basins.pdf).
Shape files can be found here:
(OSPAR)
http://geo.ices.dk/viewer.php?add_layers=ext_ref:ospar_regions_without_coastline.
(HELCOM)
http://geo.ices.dk/viewer.php?add_layers=ext_ref:helcom_subbasins

Legal scope:
Generically, all the governments and intergovernmental commissions requesting and receiving advice from ICES and all contracting parties to OSPAR and HELCOM have signed international agreements under UNCLOS 1995 Fish Stocks agreement article 5 and 6 to incorporate fisheries impacts on other components of marine ecosystems and WSSD 2002 article 30 to implement an ecosystem approach in relation to oceans policy including fisheries. These agreements include an obligation to collect and share data on, inter alia, vessel position (UNCLOS FSA art 5) and to support assessment of the impacts of fisheries on non-target species and the environment (UNCLOS FSA art 6).
Specifically, ICES has a standing request from the European Commission to advise and inform on the impacts of fisheries on the marine environment. Currently it provides advice on the impact of fishing on birds and mammals. It is required to expand this advice to the impact on benthic habitats. The DCF makes it a requirement to report on spatial fishing activities in

relation to habitat (indicators 5, 6 and 7 of Annex XIII to Commission Decision (2010/93/EU)) and ICES is requested by the Commission to provide these indicators.
For EU Member States, this data call is under the DCF regulation ((EC) No 199/2008 and Commission Decision 2010/93/EU) and in particular, Article 18(1) (a) of regulation (EC) No 199/2008 which states that Member States shall make detailed and aggregated data available to end-users to support scientific analysis, as a basis for advice to fisheries management. ICES is thus mandated to request VMS and logbook information to provide this advice. This mandate is supported by international agreements and the current EU data collection framework (DCF). This Data call follows the principles of personal data protection, as referred to in paragraph (16) of the preamble in Council Regulation (EC) No 199/2008.

Electronic Advice outputs:
The advice outputs based on data will result in electronic outputs. This means: in addition to the graphical images found in the advice, underlying information on aggregated spatial distribution of fishing effort will be presented in a form that will enable its use in spatial analysis to facilitate use of the advice. Maps will be communicated to the advice recipient as pdf files, tables and shapefiles, where the aggregated international effort in both cases is presented as one value per c-square per group of gear and year. This information is provided as an integral part of the advice. The underlying data themselves will not be made available to other parties.

Secure usage and deletion:
Regarding the transmission, storage and handling of data, we inform that ICES will provide a secure (https) folder, and a unique password for each country to upload their data to. The data will only be accessible by the technical staff in the Secretariat for the purposes of providing the data to the specific processes/working groups as named in the call. When the ICES professional officer has confirmed that the information products and the management advice is finalized, the country data delivered to ICES will be deleted from the ICES servers.

In addition, ICES has an agreed VMS/logbook access and use policy for data resulting from this type of data call, which governs the process of who is given access and what they can do with the data. See http://www.ices.dk/marine-data/Documents/VMS_DataAccess_ICES.pdf

How to report the data:
Format: The data call asks for coupled VMS and logbook data that is anonymized. The time period covered is 2009 to 2015. Data for VMS combined with logbooks should be submitted in the exchange format described in Annex 1. Alternatively, other self-describing formats that includes information necessary to create the specified exchange format can be used. In addition, all vessel categories and fishing activity should be submitted in the exchange format described in Annex 2 – including the fishing activity already reported in Annex 1.

Resolution: Data should be reported anonymised and aggregated in a grid of concise spatial query and representation system of 0.05 x 0.05 degree grid using the approach of C-square reference XXXX:XXX:XXX:X (see Rees 2003).

Electronic Submission: The data and any supporting information should be reported to the ICES secure website. Please contact accessions@ices.dk for a country specific login.

Timing: The data should be submitted by 15th March 2016

Contact points: submissions accessions@ices.dk

Spatial reporting reference: Rees, T. 2003. "C-square s", a new spatial indexing system and its applicability to the description of oceanographic datasets. Oceanography, 16(1), 11–19.

Annex 1 Exchange format for combined VMS and Log book data.

Order	Name	Type	Req.	Basic checks	Comments
1	Record type	String	M		Fixed value VE
2	Vessel Flag Country	String	M	Code list	ISO 3166-1 alpha-3 codes. The flag country of the vessel.
3	Year	Integer	M	Code list	1900 to 3000
4	Month	Integer	M	Code list	1 to 12
5	C-square	String	M	Code list	0.05x0.05 degree, C-square reference XXXX:XXX:XXX:X
6	Vessel length category	String	M	Code list	"<12" (if available) "12-15" ">=15"
7	Gear code	String	M	Code list	DCF level 4*
8	Fishing activity category European lvl 6*	String	M	Code list	fishing activity category – it is recommended to submit DCF level 6*
9	Average fishing speed	Decimal numeral	M	1 to 50	Average fishing speed within the aggregation: year, month, c-square, vessel length category, gear code and DCF métier.
10	Fishing hour	Decimal numeral	M	1 to 9999999999	Fishing hour calculated from VMS data.
11	Average Vessel Length overall	Decimal numeral	M	1 to 200	Average vessel length within the aggregation: year, month, c-square, gear code and DCF métier .
12	Average kW	Decimal numeral	M	1 to 9999999999	Average vessel power (kW) within the aggregation: year, month, c-square, gear code and DCF métier .
13	kW*fishing hour	Decimal numeral	M	1 to 9999999999	
14	Tot weight	Decimal numeral	M	1 to 9999999999	Total landings of all species caught. In kg
15	Tot value	Decimal numeral	M	1 to 9999999999	Total value of all species caught. In Euro

M = mandatory.
*DCF level = Fishing activity – Metier:
https://datacollection.jrc.ec.europa.eu/wordef/fishing-activity-metier

Annex 2 Exchange format for reporting Log book data.

Order	Name	Type	Req.	Basic checks	Comments
1	Record type	String	M		Fixed value LE
2	Vessel Flag Country	String	M	Code list	ISO 3166-1 alpha-3 codes. The flag country of the vessel.
3	Year	Integer	M	Code list	1900 to 3000
4	Month	Integer	M	Code list	1 to 12
5	ICES statistical rectangle	String	M	Code list	Uppercase, e.g. 45F2
6	Gear code	String	M	Code list	DCF level 4*
7	All fishing activity category European lvl 6*	String	M	Code list	All fishing activity category – DCF level 6*
8	Vessel length category	String	M	Code list	Vessel length grouped into: "<12" "12-15" ">=15"
9	VMS enabled category	String	M	Code list	Yes/No
10	FishingDays	Decimal numeral	M	1 to 9999999999	Number of fishing days by ICES rectangle. If a vessel fished in several ICES squares one day, the day will be divided by the number of ICES rectangles.
11	kW*fishing days	Decimal numeral	M	1 to 9999999999	
12	Tot weight	Decimal numeral	M	1 to 9999999999	Total landings of all species caught. In kg
13	Tot value	Decimal numeral	M	1 to 9999999999	Total value of all species caught. In Euro

M = mandatory
*DCF level = Fishing activity – Metier:
https://datacollection.jrc.ec.europa.eu/wordef/fishing-activity-metier