Specifications of dataset formats and protocols for the GCFM area:

data submission and transmission to and from the GFCM VMS database, between GFCM member states, and between GFCM member states and cooperating regional fisheries management organizations (RFMO)s

In order to facilitate the timely and accurate transmission of data between the GFCM secretariat, the organization's member states and any cooperating RFMOs, all data will be transmitted and presented in accord with accepted international standards for such activity. Furthermore, because of the overlap between the GFCM roster of member countries and the area of competence with those of the European Union, GFCM will maintain compatibility with the EU on the key elements regarding data protocols, data formats and message formats.

Message protocols: Data will be transmitted using the HTTPS protocol by way of either an "http post" or an" http get" request.

Service message formats: Following current practice in use by an important majority of RFMOs, messages will be transmitted using the North Atlantic Format (NAF). This is a simple, slash-delimited format that can be transmitted by virtually any means and is both easily coded and decoded.

The actual composition of a report is constructed using a double slash (//) and code to indicate the beginning of a field with a single slash (/) separating the code from its related data entry. The fields required to compose a report are as follows:

Element	Code	Width (maximum characters)	Mandatory	Remarks
Start of Record	SR		Х	
Type of message	TM	3	X	POS = position, CAT = catch, PLL = poll
Internal number	IR	12	X	GFCM vessel ID
Radio call sign	RC	7		Vessel ID confirmation
Vessel name	NA	40	X	
Flag state	FS	3	X	ISO Alpha-3 code
Time	TI	4	X	Position UTC hhmm
Date	DA	6	X	Position date yymmdd
Latitude	LA	5	X	Degrees and minutes Nddmm or Sddmm
Longitude	LO	6	X	Degrees and minutes Edddmm or Wdddmm
Speed	SP	3		Knots and tenths kkt
Course	CO	3		Degrees ddd

End of record	ER		Х	
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Using the elements as a base, a position report for a Japanese vessel named Gengi reporting its position of 40.54 north latitude and 5.75 east longitude steaming at a speed of 8.2 knots on a course of 277 degrees at 16:25 on 12 December 2011 would take the following form:

//SR//TM/POS//NA/GENGI//FS/JAP//TI/1625//DA/111212//LA/N4054//LO/E0575//SP /082//CO/277//ER

Electronic logbook: The electronic logbook will give GFCM member states timely access to the results of fishing activity, expressed in, amongst other parameters, quantities of species aboard vessels, where and under which conditions the species were caught, and their place of landing. Added to timely VMS data, this provides compliance and resource management personnel with the ability to work in quasi-real-time in establishing allowable catch and effort parameters as well as in determining strategies for fishing activities in specific geographical areas.

The European Commission has been preparing an electronic logbook since 2008 with its decision 2008/949/EC that provides the detail for the operation of such an electronic reporting system (the text of that decision can be found at this URL: http://eur-

lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:346:0037:0088:EN:PDF). Within this decision, specific parameters for electronic log entries in the Mediterranean and Black Sea areas are defined and the GFCM is specified as the competent regional organization for those areas. Given the desirability of maintaining compatibility with the EU on both VMS and the electronic logbook, the adoption of these parameters will serve the purposes of both the GFCM and the EU.

The EU has also published guidelines for data exchange between member states (text of the guidelines is available at this URL: http://ec.europa.eu/fisheries/cfp/control/technologies/downloads/2009_11_12_ers_guidelines.pdf). Once again, the adoption of these guidelines presents only advantages in the context of regional cooperation between the GFCM member states whether or not they are also EU member states.

It should be noted that, because of the complexity of establishing an electronic logbook scheme, the EU has fallen behind in its schedule and the parameters set out in the above documents are likely to be modified. In any case the EU member states of the GFCM will be adopting these parameters as they evolve and the non-EU members need only join that effort.