



International Consultations on the Establishment of the South Pacific Regional Fisheries Management Organisation

Interim Secretariat Report on Specifications of Some Fields in the Data Standards

Interim Secretariat

1. Introduction

There remains a need for greater consistency and specificity associated with a number of the existing standards in the *Data Standards*¹ document. Participants are asked to consider and discuss the items detailed below.

2. Specifications for the Exchange of Data

2.1 Date/Time Information

Date and time information can be represented in many different formats. The only standard specified for [date and] time data exchange to date is that described in Annex 5 of the original standards (Annex 9 of the draft consolidated data standards²) which states:

1. *Coordinated Universal Time is to be used to describe times*

Coordinated Universal Time (UTC) is used to ensure date and time information is recorded in a standard way so that there is consistency between data which has been collected from different time zones.

At the Guayaquil meeting of the DIWG, the Interim Secretariat requested that there be a standard format specified for submission of UTC date/time data (see Item 6: Other Business of the DIWG). An agreed submission format for both date and time data will help to ensure greater consistency between datasets submitted to the Interim Secretariat by different participants.

Members asked the Interim Secretariat to develop a standard submission format inter-sessionally. The Interim Secretariat proposes the following format for the exchange of date/time data (based on the ISO standard 8601):

YYYY-MON-DDThh:mm:ss

(see below for fuller explanation of this notation).

¹ The [Data Standards](#) were agreed at the 3RD International Meeting held in Reñaca, Chile, 2007. Refer also to the draft consolidated data standards (dated 28 April 2008) – paper SPRFMO-VI-DIWG-04.

² Paper SPRFMO-VI-DIWG-04: Interim Secretariat report on draft consolidated data standards for the collection, reporting, verification and exchange of SPRFMO data

According to the proposed format, date only information would be submitted as:

YYYY-MON-DD

Where:

- **YYYY** - represents a 4-digit year e.g. "2007"
- **MON** - represents a 3-character month abbreviation e.g. "APR"
- **DD** - represents a 2-digit day e.g. "05"
- **T** - is a space separator
- **hh** - represents hours based on the 24hr clock (length = 2 digits) e.g. "16"
- **mm** - represents minutes (length = 2 digits) e.g. "05"
- **ss** - represent seconds (length = 2 digits) e.g. "00"

Example

2003-JUL-17T13:10:00

1.10pm (1310h), 17 July 2003

Requesting participants to provide a 3-letter (alpha), rather than a 3-digit, month abbreviation should help minimise any data ambiguities which could result if participants inadvertently switched the order of the two numeric day/month fields.

Recommendations

- That Working Group members adopt the Interim Secretariat's proposed data exchange/submission standard for UTC date and time information of:

YYYY-MON-DDThh:mm:ss

- That the data exchange section of the Standards document is updated accordingly.

2.2 Positional (Latitudinal and Longitudinal) Data

Latitudinal and longitudinal can also be represented in many different formats.

There is currently no agreed *specific* format for participants to use for the exchange/submission of detailed positional information to the Interim Secretariat e.g. for tow by tow/set by set data and for Vessel Monitoring System (VMS) positions, etc.

The only standard specified for the exchange of positional data is that described in Annex 5 of the original standards (Annex 9 of the draft consolidated data standards³):

2. *Degrees, Minutes and Seconds are to be used to describe locations. Where locations are required to be provided at the 1/10th of a degree resolution, this is to be achieved by rounding to the nearest 6 minutes.*

The Interim Secretariat proposes the following standard for the exchange of latitudinal/longitudinal information:

- Latitudinal and longitudinal information should be provided in decimal degrees to the nearest 0.1 degree unless otherwise specified by the data standards
- Northern latitudes and eastern longitudes should be indicated by the use of [un-signed] positive decimal degree values
- Southern latitudes and western longitudes should be indicated by the use of negative decimal degree values

Example

Latitude	<ul style="list-style-type: none"> • Degrees: Represented as positive or negative numbers from 0 to 89.99 E.g. If value = 83.2, this means 83.2° N E.g. if value = -83.2, this means 83.2° S
Longitude	<ul style="list-style-type: none"> • Degrees: Represented as positive or negative numbers from 0 to 179.99 E.g. If value = 83.2, this means 83.2° E E.g. if value = -83.2, this means 83.2° W

Recommendations

- That Working Group members adopt the Interim Secretariat's proposed data exchange/submission standard for data/exchange submission of latitudinal and longitudinal data
- That the data exchange section of the Standards document is updated accordingly.

2.3 Species Codes for Recording Sensitive Benthic Species and Incidental Capture Species

The current specifications for data exchange contain the following data standard in relation to the use of species codes – see Annex 9 of the draft consolidated Data Standards³:

3. a) Species are to be described using the FAO 3-letter species codes⁴.

The species/group codes in this FAO species list are all fish species codes.

³ Paper SPRFMO-VI-DIWG-04: Interim Secretariat report on draft consolidated data standards for the collection, reporting, verification and exchange of SPRFMO data

⁴ www.fao.org/fi/statist/fisoft/asfis/asfis.asp

The Observer standards require that information is collected for non-fish as well as fish species, *i.e.* for sensitive benthic species, and for incidentally captured species of marine mammals, seabirds or reptiles.

It is proposed that a list of non-fish species codes is sourced (where codes do not overlap with the FAO fish species codes), if possible, and that codes from this list are adopted for use as standard codes for the collection and recording of non-fish species information. If a pre-existing list of non-fish species codes is unavailable, the DIWG should consider developing one for use by participants.

Recommendations

- That Working Group members consider adopting a standard set of non-fish species codes which would be appropriate for the recording of benthic and incidental marine mammal/ seabird/ reptile species
- That the data exchange section of the standards document is updated to reflect any newly adopted standard non-fish species code list(s).

3. Fishing Activity Data Standards for Data Collection and Exchange

3.1 Standard for Trawl Fishing Activity

(Annex 1 of the draft consolidated data standards⁵)

There are some guidelines provided in the Standards document regarding the kinds of variables that should be collected by participants for the following two fields:

- l) Type of trawl: bottom or mid-water
- m) Type of trawl: single, double or triple.

However, the standards do not explicitly specify how these trawl types should be formatted for the exchange of data/ data submissions to the Interim Secretariat. It would be preferable if trawl type information was provided to the Interim Secretariat as 1 to 3 letter (1 to 3 alpha) standardised codes.

Note that according to the International Standard Statistical Classification of Fishing Gear (ISSCFG) codes:

- 'TB' - is used to describe "bottom trawls (not specified)", and
- 'TM' - is used to describe "midwater trawls (not specified)".

Therefore, use of the above codes to denote bottom or midwater trawls respectively, would be consistent with the ISSCFG standard fishing gear codes already adopted in the wider standards.

⁵ *Paper SPRFMO-VI-DIWG-04: Interim Secretariat report on draft consolidated data standards for the collection, reporting, verification and exchange of SPRFMO data*

The ISSCFG codes do not include standard abbreviations for single, double or triple trawls.

Recommendations

- That for fishing activity data submissions to the Interim Secretariat, the following abbreviations should be used to designate the various trawl types:
 - “TB” for Bottom Trawl, and “TM” for Midwater Trawl
 - “S” for Single Trawl, “D” for Double Trawl, and “T” for Triple Trawl
- That the Trawl Fishing Activity Data Standard (for both fishing vessel crew recorded and observer recorded tow by tow data), and the data exchange sections of the standards document are updated accordingly.

3.2 Standard for Purse Seine Fishing Activity

(Annex 2 of the draft consolidated data standards⁶)

For the Purse Seine Fishing Activity Data Standard, there are no guidelines provided regarding the kinds of values that should be stored in the field:

- n) School association.

However, some guidelines appear to be provided for the corresponding Observer Catch & Effort Data Standard for Purse Seine Fishing Activity which specifies:

- k) Type of school association (FAD, debris, seabirds, surface, sonar target).

It would be useful to more clearly define the types of data that are expected to be collected/ submitted for “school association type” in the Purse Seine Fishing Activity Data Standard. It would also be beneficial if members could agree on a prescribed list of standard values/ abbreviations which should be used to designate school association type for data exchange purposes.

Recommendations

- That a standard set of agreed school association types be adopted
- That these take the form of a standard set of variable length words considered acceptable e.g. “FAD”, “debris”, “seabirds”, “surface”, “sonar target”, “other”, or alternatively a set of 3-letter or other standard length abbreviations
- That the Purse Seine Fishing Activity Data Standard, the Observer Catch and Effort Purse Seine Fishing Activity Data Standard, and data exchange sections of the standards document be updated accordingly.

⁶ Paper SPRFMO-VI-DIWG-04: Interim Secretariat report on draft consolidated data standards for the collection, reporting, verification and exchange of SPRFMO data

3.3 Standard for Potting Methods Fishing Activity

(Annex 5 of the draft consolidated data standards⁷)

There are no guidelines provided regarding the kinds of variables that should be stored in the Potting Method Fishing Activity Data Standard for the fields:

- (n) Type of pots
- (p) Type of bait used.

It would be beneficial to more clearly define the types of data that are expected to be collected, and later submitted to the Interim Secretariat for these data fields.

Note that the field “type of bait used” is also part of the Drop/Dahn Lining Fishing Activity Standard (see Section 3.4 below), and that any decisions made about the “type of bait” field for the Potting Methods Standard, should ideally also be applied to the Drop/Dahn Lining Standard to ensure consistency between different fishing activity method data sets.

Recommendations

- That bait types would best be represented as set 3-letter (3-alpha) or similar length standard abbreviations
- That a standard set of agreed pot and bait types be adopted and inserted into the fishing activity potting methods standard, and that these same standards are adopted for the “type of bait used” field in the Drop/Dahn Lining Fishing Activity Data Standard.

3.4 Standard for Drop/Dahn Lining Fishing Activity

(Annex 6 of the draft consolidated data standards⁷)

The Standards provide no specific guidelines regarding the kinds of variables that should be collected and stored in the fields:

- (p) Type of hooks used,
- (q) Type of leader used,
- (s) Type of bait used.

It would be beneficial to more clearly define the types of data that are expected to be received for the type of hooks, leaders and bait used in the Drop/Dahn Line Fishing Activity Standard.

Note that the field “type of bait used” has already been discussed (see section 3.3 above) as it also included in the Potting Methods Standard. Therefore, any decisions made about this field would ideally be applied across all fishing activity method standards to ensure consistency between different fishing activity data sets.

⁷ Paper SPRFMO-VI-DIWG-04: Interim Secretariat report on draft consolidated data standards for the collection, reporting, verification and exchange of SPRFMO data

Recommendations

- That hook, leader and bait types would best be represented as a set of 3-letter (3-alpha) or similar length standard abbreviations
- That any agreed bait type standard is consistent with the bait type standard adopted for the Potting Methods Fishing Activity Data Standard
- That a standard set of agreed hook, leader and bait types be adopted and inserted into the Drop/Dahn Lining Fishing Activity Data Standard, and that these same standards be applied to the “type of bait used” field in the Potting Fishing Activity Data Standard.