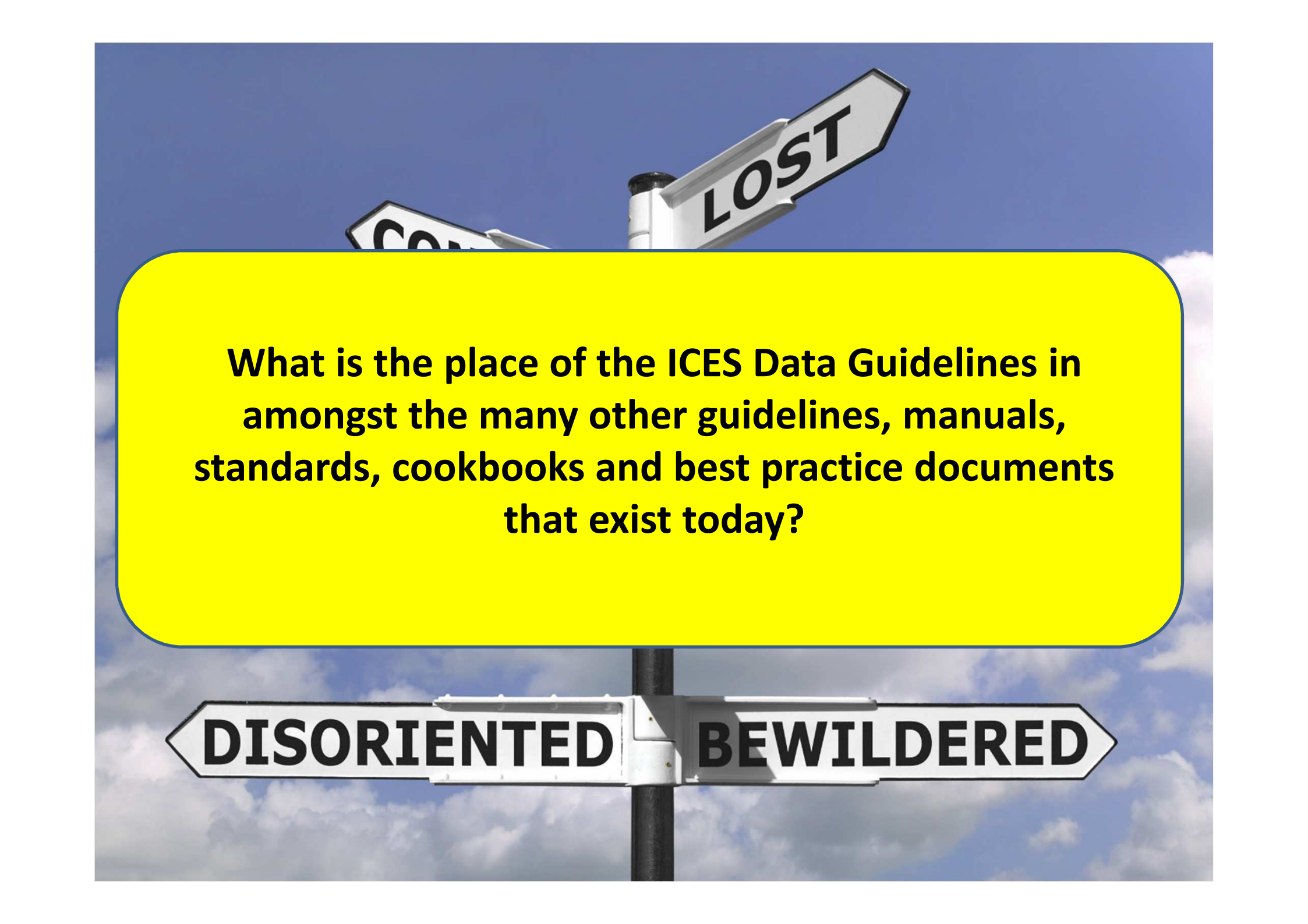


The ICES Data Type Guidelines and their place and role in the profusion of guidelines, manuals, standards, cookbooks and best practice

Neil Holdsworth, ICES, Denmark
Lesley Rickards, BODC, UK
Taco de Bruin, NIOZ, Netherlands
Hjalte Parner, ICES, Denmark
Sjur Ringheim Lid, IMR, Norway
Garry Dawson, UK Hydrographic Office, UK



What is the place of the ICES Data Guidelines in amongst the many other guidelines, manuals, standards, cookbooks and best practice documents that exist today?

DISORIENTED

BEWILDERED

Aim of this presentation

1. To raise the profile of the ICES Data Type Guidelines
2. A 'call to action' to bring together the different bodies (including IODE/JCOMM, SeaDataNet, national activities) to make a more coordinated approach to linking the guidelines, and to map out the complex landscape

Assessing the profile of ICES Data Guidelines

- Current knowledge and usage of the present set of ICES Data Type guidelines investigated
- Some positives (they are known, used, referenced, etc.)
- Some negatives (not known, not used, etc.)
- Before reviewing and updating the guidelines, ICES Data and Information Group agreed that the first priority was a communication strategy

ICES Data Guidelines: Why?

- Data held at the ICES Data Centre are used in various assessments for expert groups and regional sea conventions
- In order to ensure comparable data with high quality, guidelines have been developed and adopted

ICES Data Guidelines: **What?**

- ICES Data and Information Group (DIG), and its predecessors, developed guidelines to assist those involved in the **collection**, **processing**, **quality control** and **exchange** of data
- Adopted by the ICES Data Centre
- Recommended to the ICES Community

Moored Current Meter
Moored ADCP
Shipborne ADCP
CTD
XBT
Seasoar/Batfish
Profiling floats
Drifting buoys
Near-surface underway
Multi-beam echo-sounders
Discrete water samples
Chlorophyll and Nutrient data
Biological plankton

ICES Data Guidelines: **What?**

Each guideline addresses the data and metadata requirements of a specific data type. They have a consistent structure covering three main areas:

- Data Description – information to ensure data can be used by others
 - Data History – QC, problems, resolutions, etc.
 - Referral Service
- Example: [biological plankton data](#)

ICES Data Guidelines: Questions

- **Are there overlaps or duplications between the ICES guidelines and other similar activities?**
- Each organisation, programme and project is trying to be “the” place to go – how can better signposting be provided so users can find what they need?
- Related to the above – are good links in place both from the ICES Data Guidelines to more detailed manuals and to the ICES Data Guidelines from elsewhere?
- Is there guidance available on which guidelines, manuals, etc., are best for which purpose?
- Can we provide information describing the benefits of data guidelines to users?

marine data standards

useful links

library

meetings >

publications >

key documents >

downloadable content >

arranged below by theme.

bathymetry

fisheries and aquaculture

human impact

marine archaeology

marine biodiversity

- archiving digital images (15sep11)
- benthic invertebrate sediment sampling by grab or core (15sep11)
- cetacean sighting and identification (15jul10)
- fish and benthos by static pot, net or trap (15jul10)
- fish and benthos by trawl or dredge (15jul10)
- moored oceanographic instruments (15sep11)
- oceanographic underway transect (15sep11)
- oceanographic vertical profile data (15sep11)
- shellfish stock assessment (15jul10)
- video tow surveys for species or biotopes (20jul10)
- water sample for biology or chemistry (8jan13)

marine chemistry

marine geology

Generate metadata



MEDIN Metadata Discovery Standard

MEDIN Metadata helpline
Tel: 01752 633291
email: [helpline](#)

>> UK location Programme

>> Underwater sound forum

>> FAQs

JCOMM Catalogue of Practices and Standards



List of all records in the database

Records sorted by title

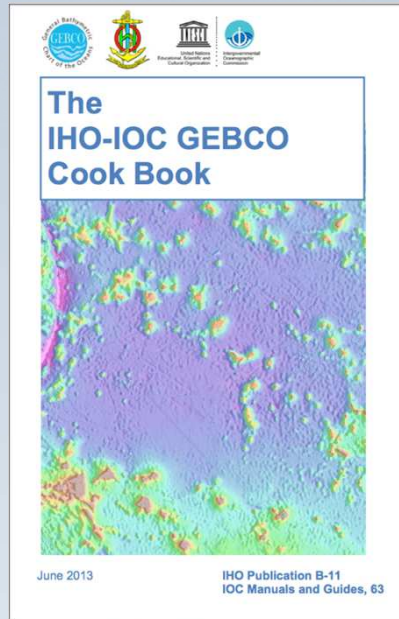
Sort by:

Title	Subject	Publisher
Advances in the Applications of Marine Climatology - The Dynamic part of the WMO Guide to the Applications of Marine Climatology (REV. 1, June 2005)	Marine climatology	ET-MC
Algorithms for the Computation of Fundamental Properties of Seawater (UNESCO technical papers in marine sciences, 44, 1-53, 1983)	Algorithm Seawater UNESCO	IOC
Chemical Methods for Use in Marine Environment Monitoring	Chemical marine monitoring	GOOS
DBCP Quality Control Guidelines	GTS Buoy data	TC DBCP
Electronic chart Systems Ice Object Catalogue		
Electronic Chart Systems Ice Objects Catalogue	version 1	ET-SI
Environmental Design and Analysis in Marine Environmental Sampling	Observation analysis environment sampling	JCOMM via SCG
Estimation of extreme wind wave heights / by L.J. Lopatoukhin et al.	Extreme wind wave	ET-WS
GTSP Real-Time Quality Control Manual	GTSP water temperature profile	IOC Manuals and Guides 22

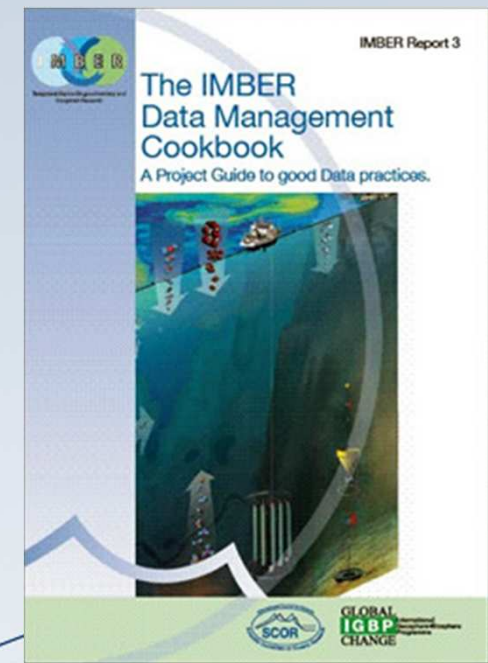
Examples of quality control guidelines & manuals

- First IODE Workshop on Quality Control of Chemical Oceanographic Data Collections, IOC Project Office for IODE, Oostende, Belgium, 8-11 February 2010 Paris, UNESCO, 25 March 2010 (IOC Workshop Report No. 228) (English)
- EuroGOOS DATA-MEQ working group. 2010. Recommendations for *in-situ* data Near Real Time Quality Control. EG10.19. December 2010. 23pp.
- IOC/Unesco 2009. GTSP Real-time Quality Control Manual , Second Edition. IOC Manuals and Guides No. 22
- Chapman, A. D. 2005. Principles of Data Quality, version 1.0. Report for the Global Biodiversity Information Facility, Copenhagen.
- NOAA. 2001. Handbook of Automated Data Quality Control and Procedures of the National Data Buoy Center, US Dept. of Commerce, National Oceanic and Space Administration. May, 2001.
- WOD, 1998. World Ocean Database, Documentation and Quality Control, Version 2, Silver Spring, MD, December 1999.
- Manual of Quality Control Procedures for Validation of Oceanographic Data, UNESCO, IOC - Manuals & Guides, 1993, Manual And Guides 26
-
- And many, many more...

Some examples of “Cookbooks”



IHO-IOC GEBCO Cookbook IHO Publication B-11, IOC Manuals and Guides 63, June 2013



The IMBER Data Management Cookbook – A project guide to good data practices (2011)
Pollard, R.T., Moncoiffe, G. And O’Brien, T. D.
IMBER Report No. 3. IPO Secretariat, Plouzane, France, 16pp.

ICES Data Guidelines: Questions

- Are there overlaps or duplications between the ICES guidelines and other similar activities?
- **Each organisation, programme and project is trying to be “the” place to go – how can better signposting be provided so users can find what they need?**
- Related to the above – are good links in place both from the ICES Data Guidelines to more detailed manuals and to the ICES Data Guidelines from elsewhere?
- Is there guidance available on which guidelines, manuals, etc., are best for which purpose?
- Can we provide information describing the benefits of data guidelines to users?



Better signposting?

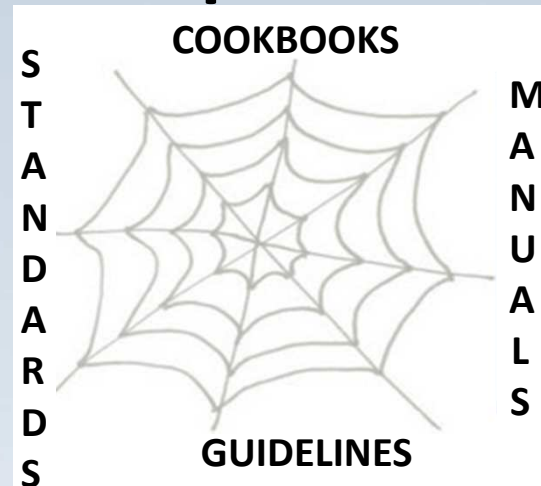


Hierarchical?



Guidelines
Standards
Cookbooks
Manuals

Equal?



Who takes responsibility?

- ICES Data Centre?
- IODE/JCOMM Ocean Data Standards?
- IODE OceanTeacher?

ICES Data Guidelines: Questions

- Are there overlaps or duplications between the ICES guidelines and other similar activities?
- Each organisation, programme and project is trying to be “the” place to go – how can better signposting be provided so users can find what they need?
- **Related to the above – are good links in place both from the ICES Data Guidelines to more detailed manuals and to the ICES Data Guidelines from elsewhere?**
- Is there guidance available on which guidelines, manuals, etc., are best for which purpose?
- Can we provide information describing the benefits of data guidelines to users?

Examples of linkages between guidelines

- Each ICES Data Guideline links to more detailed manuals and information
- SeaDataNet quality control manual includes the ICES Data Guidelines
- IODE's OceanTeacher links to the ICES Data Guidelines
- BODC data submission page references the ICES Data Guidelines
- **BUT** if you are new and want to find how to do something how do you know where to go?

ICES Data Guidelines: Questions

- Are there overlaps or duplications between the ICES guidelines and other similar activities?
- Each organisation, programme and project is trying to be “the” place to go – how can better signposting be provided so users can find what they need?
- Related to the above – are good links in place both from the ICES Data Guidelines to more detailed manuals and to the ICES Data Guidelines from elsewhere?
- **Is there guidance available on which guidelines, manuals, etc., are best for which purpose?**
- **Can we provide information describing the benefits of data guidelines to users?**

What can you do?

- Check out the guidelines to see if they are useful
 - Do we need them?
 - Is the structure appropriate?
 - What is missing?
 - Do we need more guidelines for other data types?
 - Could you find them?
- Suggest improvements to content
- Could your organisation link to them?

What can we (ICES DIG) do?

- Discuss with potential users
- Hold a (virtual) workshop to further discuss?
- Provide better signposting through the maze?
 - In cooperation with IODE and the IODE/JCOMM Standards and Best Practices process?
- Ensure purpose of guidelines is clear
- Listen to you?
 - And act upon your comments

