



Institute of  
Marine Engineering,  
Science & Technology

IMAR<sup>EST</sup>

OceanWise

# Marine Data Management Awareness Course

Wednesday 8 February 2017

IMarEST, 1 Birdcage Walk, London, SW1H 9JJ

*"The course provided a good  
broad overview about a  
structured data management  
system and data policy"*

**Maik Weidt**  
(Hydrographic Consultant –  
Geomatics Matters Ltd)

A solid understanding of data management is vital for anyone using marine data. This course shows you how effective data management can improve your organisation's efficiency in data acquisition, storage and analysis. It will ensure you understand data use with respect to corporate risk, reuse, audit and traceability and minimising costs.

This course (delivered by Data Management specialists OceanWise) is for those who need to work with marine data efficiently as it is acquired, used, reused and re-accessed. It is also about knowing what data you already have, and where it is, and how to find it, and how good it is.

TIME	DESCRIPTION	OUTCOME
0930 - 0945	<b>Introduction</b> <ul style="list-style-type: none"> <li>Welcome</li> <li>Objectives of the Day</li> </ul>	
0945 - 1030	<b>Part 1: Why Data Management?</b> <i>Instructor led discussion on:</i> <ul style="list-style-type: none"> <li>Data Management in Context</li> <li>The Cost and Value benefits</li> <li>Traceability and Audit</li> <li>Ease of Access and Use</li> <li>Real World Applications</li> </ul>	An understanding of: why data management is important, costs of collecting data, its value for its original purpose, related risks, potential for re-use and identifying real world applications
1030 - 1115	<b>Part 2: How do we get started?</b> <i>Presentations on:</i> <ul style="list-style-type: none"> <li>What constitutes Good Data Management?</li> <li>Where should it happen?</li> <li>When should it happen?</li> <li>How does it happen?</li> </ul>	A formal context for the understanding acquired from the previous session.
1115 - 1130	<b>BREAK</b>	
1130 - 1215	<b>Part 3: The Data Life-Cycle</b> <i>Instructor led presentations providing a basic overview of the Data Lifecycle:</i> <ul style="list-style-type: none"> <li>Creating data</li> <li>Sources of data</li> <li>Ingestion &amp; Storage of data</li> <li>Structure, attribution and relationships</li> <li>Versioning</li> <li>Sharing, Exchange &amp; Re-Use</li> <li>Archiving</li> </ul>	An understanding of the fundamentals of how data is collected, managed, published and used plus how important metadata is!
1215 - 1300	<b>Part 4: Standards</b> <i>Presentation on why Standards matter</i> <ul style="list-style-type: none"> <li>What is a standard?</li> <li>Approaches to Standards</li> <li>Standards bodies</li> <li>The OSI Model</li> </ul>	Understand the role and value of data adopting and using standards in governance
1300 - 1330	<b>LUNCH</b>	
1330 - 1400	<b>Part 4: Metadata</b> <i>Instructor led discussion on:</i> <ul style="list-style-type: none"> <li>Discovery metadata</li> <li>Metadata Profiles</li> <li>Master Data Register (MDR)</li> <li>Creating metadata</li> <li>MEDIN</li> </ul>	A basic knowledge of the value and importance of metadata in the quest for "best practise"

TIME	DESCRIPTION	OUTCOME
1400 - 1420	<b>Part 5: Controlled Vocabularies and Glossaries</b> <i>Presentation to introduce the subject</i> <ul style="list-style-type: none"> <li>What is a controlled vocabulary?</li> <li>Indexing Content</li> <li>Retrieving Content</li> <li>Explanations of marine terms</li> </ul>	Have an appreciation of the need to use words, phrases and terms to describe or explain marine data content
1420 - 1440	<b>Part 6: Coordinate Reference Systems (CRS)</b> <i>Instructor introduction to geodetic frameworks</i> <ul style="list-style-type: none"> <li>What is a Coordinate Reference System?</li> <li>What do the terms geoid, ellipsoid, spheroid and datum mean, and how are they related?</li> <li>Converting between Coordinate Reference Systems</li> </ul>	Better appreciate how real world geospatial data can be accurately represented in different ways
1440 - 1500	<b>Part 7: Data Quality</b> <i>Presentation to introduce the concept</i> <ul style="list-style-type: none"> <li>What is Data Quality</li> <li>Why is it important?</li> <li>How can it be assessed</li> </ul>	An appreciation of the importance of data quality
1500 - 1515	<b>BREAK</b>	
1515 - 1600	<b>Part 8: Data Publishing</b> <i>Instructor presentation and group discussion</i> <ul style="list-style-type: none"> <li>Process</li> <li>Delivered products and services</li> <li>Cartography</li> <li>Styling</li> <li>Licensing, Sharing and Re-use</li> </ul>	Understanding the ways in which and data is now published and considerations associated with sharing re-use
1600 - 1630	<b>Part 9: Bring your own data - the challenges!</b> <i>Interactive session to discuss and debate:</i> <ul style="list-style-type: none"> <li>How well is your data managed?</li> <li>What improvements might be made?</li> <li>How can "best practise" be achieved?</li> <li>What is hampering progress?</li> <li>How can these challenges be overcome?</li> <li>What do you need to do next?</li> </ul>	Share experiences with instructor and other attendees to make real marine data management challenges and to derive opportunities for improvement
1630 - 1645	<b>Part 10: Course re-cap</b> <i>Discussion to</i> <ul style="list-style-type: none"> <li>Identify key messages of the day</li> <li>Course feedback</li> </ul>	

**END OF TRAINING SESSION** Please note this programme may be subject to change