

‘Why Your Data Really Matters’

Governance and the Benefits of a Common Operating Picture

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Is This You?



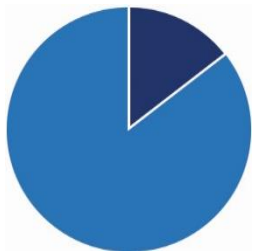
Is This You?



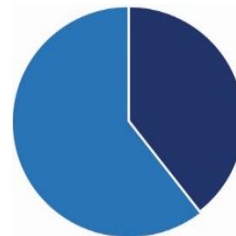
Is This You?



The Impact of Poor Data Management



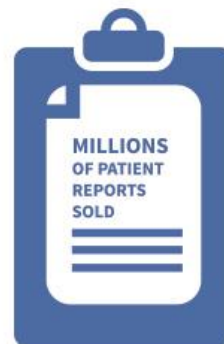
On average, organisations **waste 15-20%** of budgets dealing with inaccuracies and other data issues



In UK in 2013, 0.18% of online orders could not be delivered because of poor address data – that's **1.4 million** orders



The US economy **loses \$3.1 trillion** a year because poor data quality



Millions of UK National Health Service patient records sold to insurance firms because nobody was responsible at top level

An Important Asset?

The data and information an organisation holds is:

- One of its most important assets
- Critical to its day to day operations

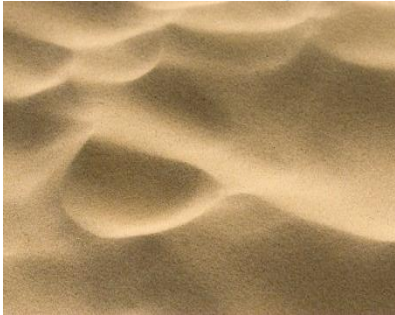
Data Anarchy?

Even so in many organisations today there is:

- No defined system or formal accountability for data
- No responsibility for data as a cross-functional business asset
- No data policy or system for escalating data issues upwards
- No process for maintaining data used in decision-making
- No or weak rules associated with controlling sensitive data

Source: <http://tdan.com/its-all-in-the-data-data-anarchy-vs-governance/20781>

The Data Challenge



**2.5 QUINTILLION
GRAINS OF SAND
ON EARTH**



**7.5 QUINTILLION
BYTES OF NEW DATA
CREATED EVERY DAY**

90%

**90% OF ALL DATA HAS BEEN
CREATED IN THE LAST 2 YEARS**

**AVERAGE BUSINESS DATA
VOLUMES DOUBLE EVERY
1.2 YEARS**



The Data Challenge

- A system of governance allows organisations to take back control of their data
- Constant vigilance and established processes are required to maintain order
- Data governance is a business responsibility
- Data is NOT an IT function alone; IT provides the tools

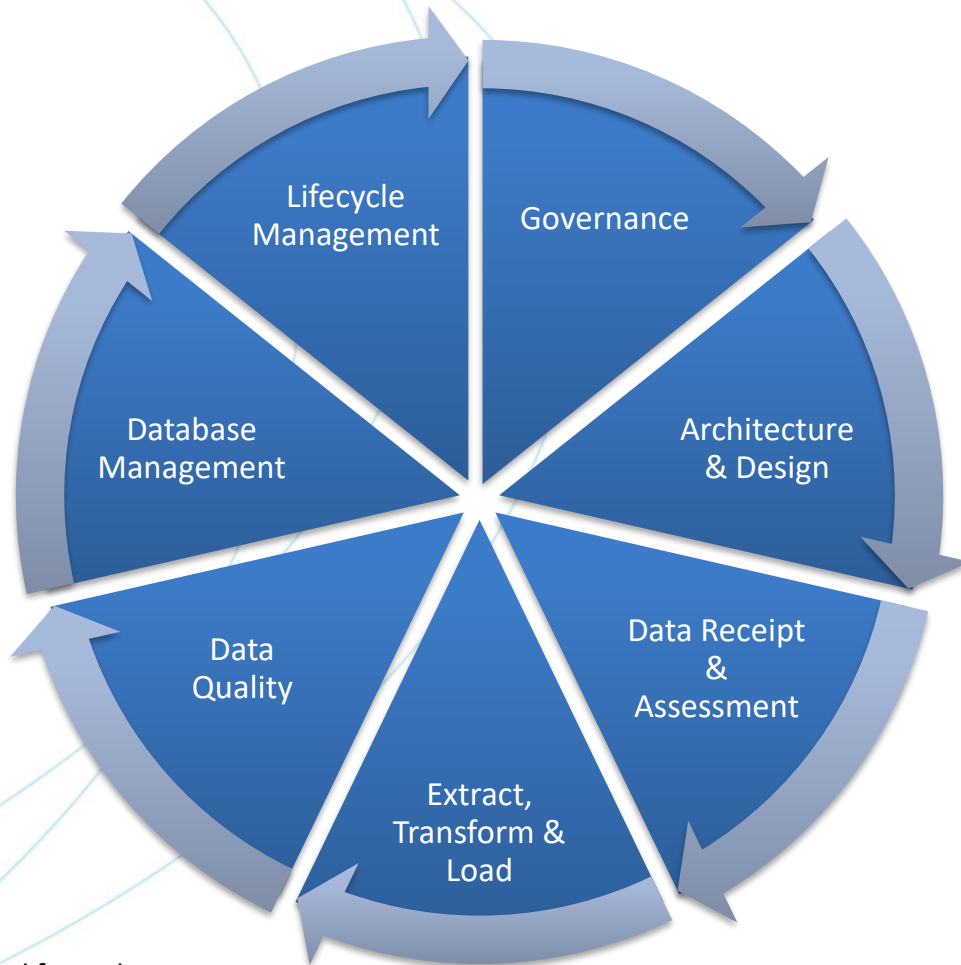


Source: sciphilos.info

Data Governance

- Data Governance is the execution and enforcement of authority over the management of data and data-related resources
- Data Anarchy is defined as no governance at all
- Organisations that cannot execute and enforce authority over the management of data are most likely in a 'semi-anarchic' state
- Data Governance needs to be communicated and involves internal and external stakeholders

Data as a Business Process



Adapted from the DAMA
DMBOK Framework by OceanWise

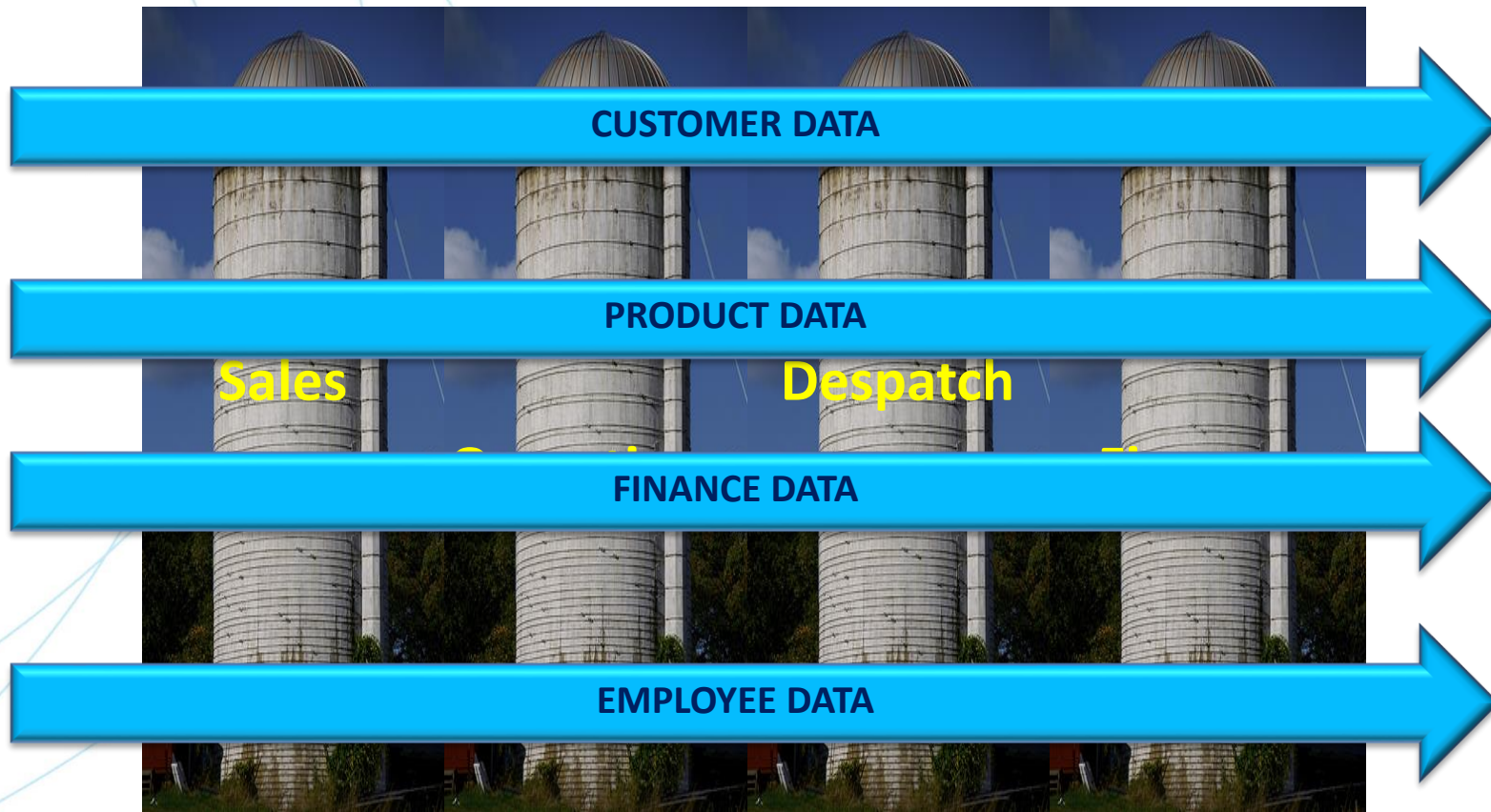
'Annex SL' used in latest of
ISO 9001, 14001 & 45001:

- Clause 1: Scope
- Clause 2: References
- Clause 3: Definitions
- Clause 4: Context
- Clause 5: Leadership
- Clause 6: Planning
- Clause 7: Support
- Clause 8: Operation
- Clause 9: Performance
- Clause 10: Improvement

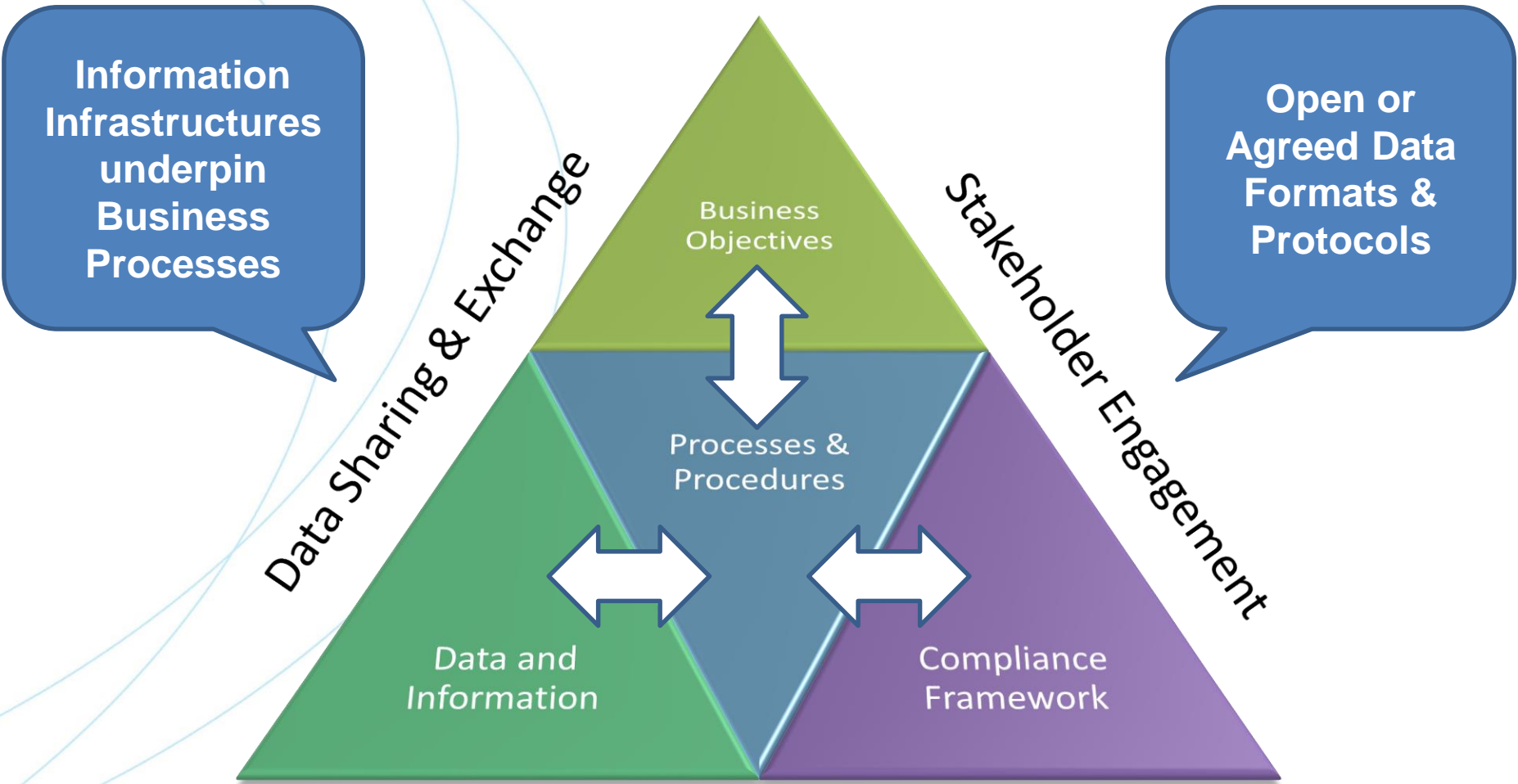
Data Silos / Stovepipes



The Data Governance Solution

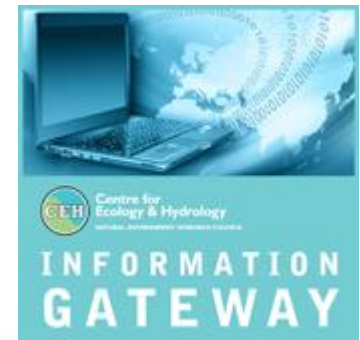


Data Governance in Context

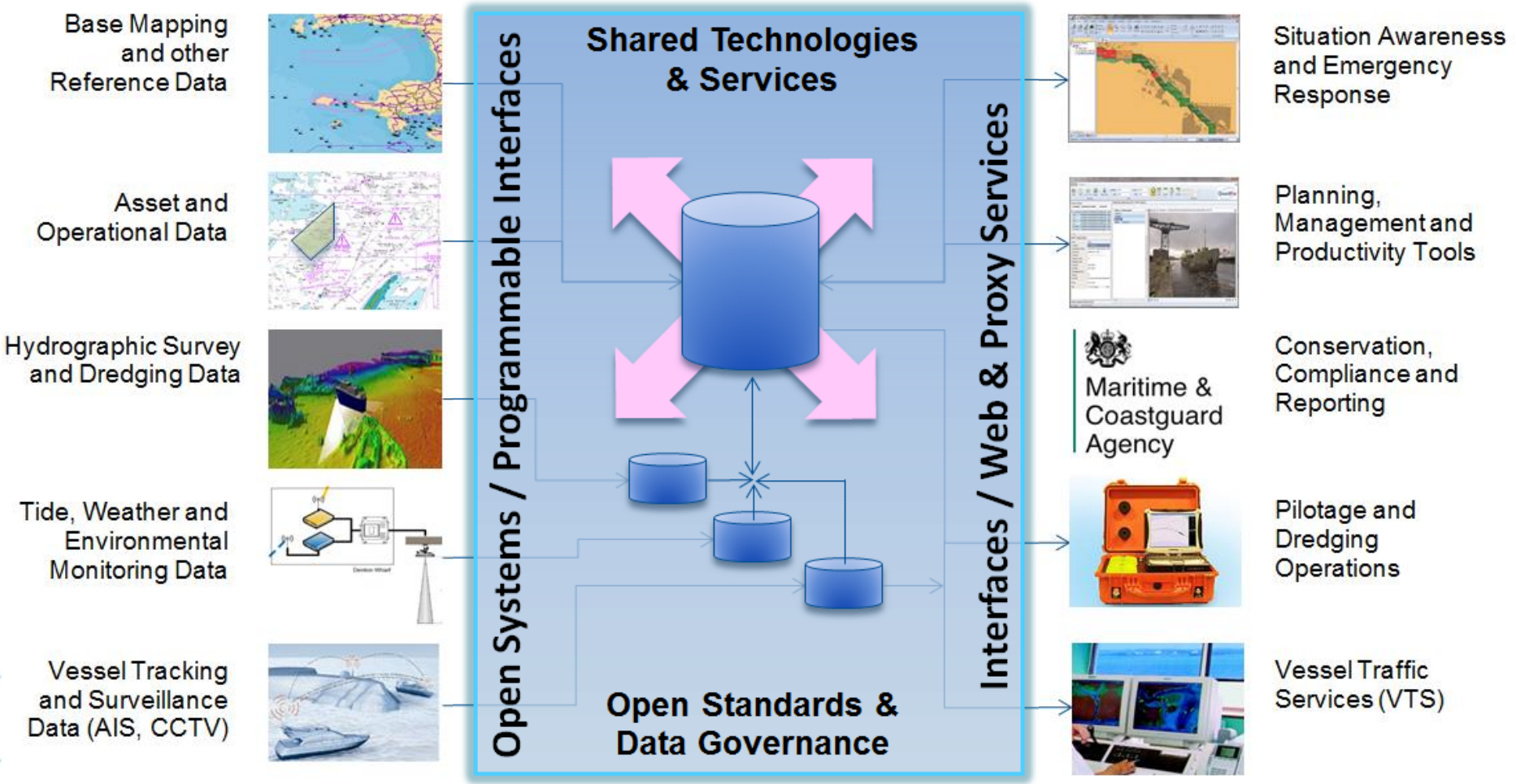


Data Sharing & Exchange

- We have many UK environmental data centres:
 - Met Office
 - British Atmospheric Data Centre
 - British Oceanographic Data Centre etc.
- And lots of initiatives and legislation regarding when and how data should be made available (e.g. INSPIRE, OfWAT, MEDIN, Open Data)
- We are 'rich' in data initiatives



Port Information Infrastructure



© OceanWise, 2011

Common Operating Picture (COP)

Data Governance and Infrastructure

- INFRASTRUCTURE
- ADMIN. BOUNDARIES
- NAUTICAL CHARTS
- ENVIRONMENTAL
- INCIDENT FEATURES
- VESSELS
- BATHYMETRY
- INFRASTRUCTURE
- TOPOGRAPHY
- METOCEAN
- WEATHER RADAR
- IMAGERY

- Static info
- Observed data
- Dynamic info
- Predicted data

Plan the Exercise




Exercise the Plan



Record Keeping




COP for UK Emergency Services



“ ResilienceDirect mapping is an essential tool for ministers and is testament to Civil Contingencies Secretariat’s collaboration with partners.”

Oliver Letwin MP, Minister for Government Policy



“ ResilienceDirect has transformed the way that local resilience forums share work and good practice, dramatically improving information-flow, which is so critical in a major incident.”

Paul Netherton, ACC, Devon and Cornwall Police

Example Port COP Application

Default Map History System OceanWise

Find Site: All Sites...

Report Incident
View Incidents

5 km
2 mi

Log in Userguide

Common data and map interface

Report Incident

Reported By: Insert reporter name...

Position Held: Insert reporter role...

Contact Details: Insert reporter contact de...

Reported From: Describe reporter location...

Incident Name: Please enter incid...

Incident Type: Type and hit tab...

Port Cluster: Select port cluster

Position: DD MM.MMM N DD MM.MMM W

Site Name: Find or add site...

Reported Time: 05/02/2017 14:37

Persons: Involved... Mi...

Muster Completed? Yes No

Vessels Involved: Type and hit tab...

Vessel State: Describe vessel state...

Data entry and record-keeping matches procedures

Defensible decision making

DATA

THE TEN

1. **UNIQUELY IDENTIFY DATA TO FACILITATE DISCOVERY & LINKING**
2. **CREATE A MASTER DATA REGISTER & METADATA**
3. **ASSIGN DATA STEWARDS**
4. **ACQUIRE REFERENCE DATA FROM BONA FIDE SOURCES**
5. **IMPLEMENT CONSISTENT NAMING STRUCTURES FOR FOLDERS & FILES**

COMMANDMENTS

5. **KEEP DATA ACCURATE & UP TO DATE**
6. **MANAGE DATA CLOSE TO SOURCE**
7. **AVOID REPLICATION**
8. **USE STANDARD REFERENCE FRAMES & A CONSISTENT MEANS OF TRANSFORMATION**
9. **USE STANDARD VOCABULARIES**
10. **COMMUNICATE THE ABOVE TO ALL STAKEHOLDERS**

Main Messages

- Data and information is one of an organisations most valuable assets and is critical to most business functions
- A system of governance ensures that data is controlled, maintained and used effectively across all business functions
- Treating data as a business management function (as with QHSE) can bring many benefits:
 - Critical data on hand when and where it is needed
 - More cost effective operational planning and management
 - Compliance and exchange data more easily with regulators
 - Establish a ‘Common Operating Picture’ in times of emergency
 - Ensure record keeping and reporting is ‘fit for purpose’

Thank You

For more information:

Register on our IMarEST Marine Data Management Course

or e-mail: john.pepper@oceanwise.eu

*Proud to be helping to improve data sharing and
management*

