



**NOAA EDM**

# **NOAA Data Management Activities**

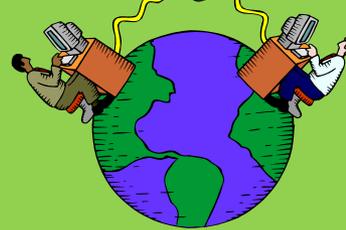
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# Vision for NOAA Data Management

All NOAA data will be: • Discoverable



• Accessible



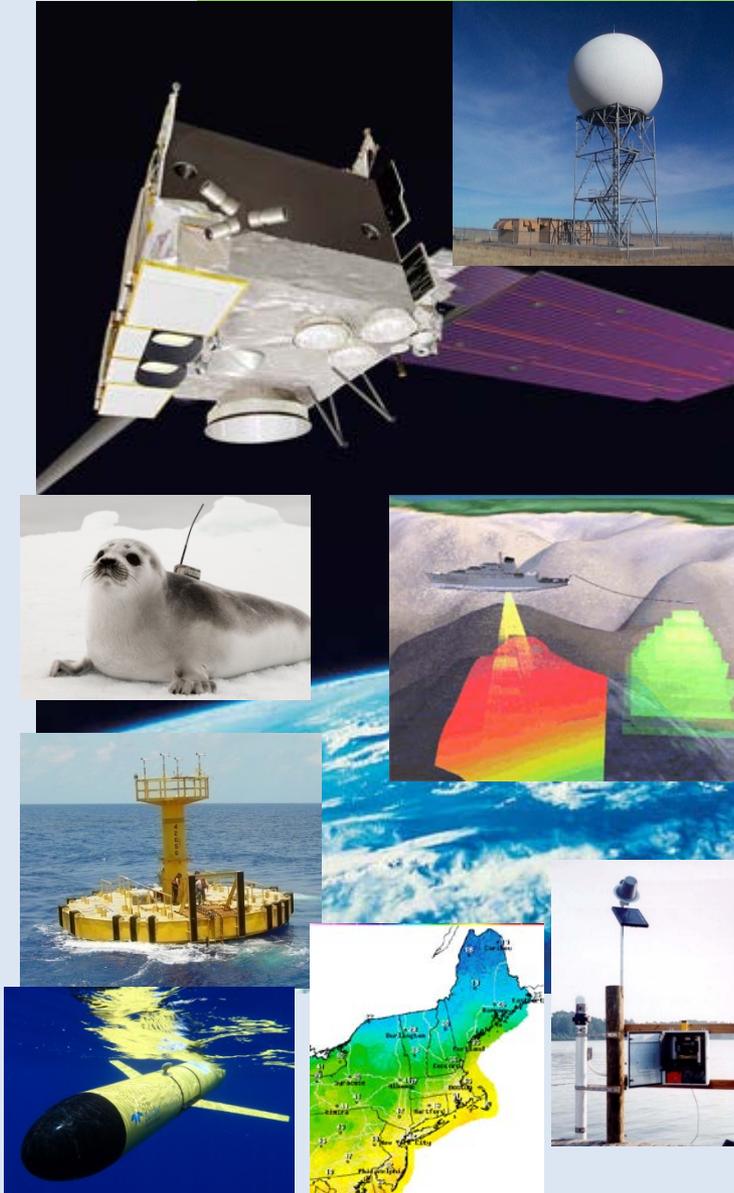
• Documented



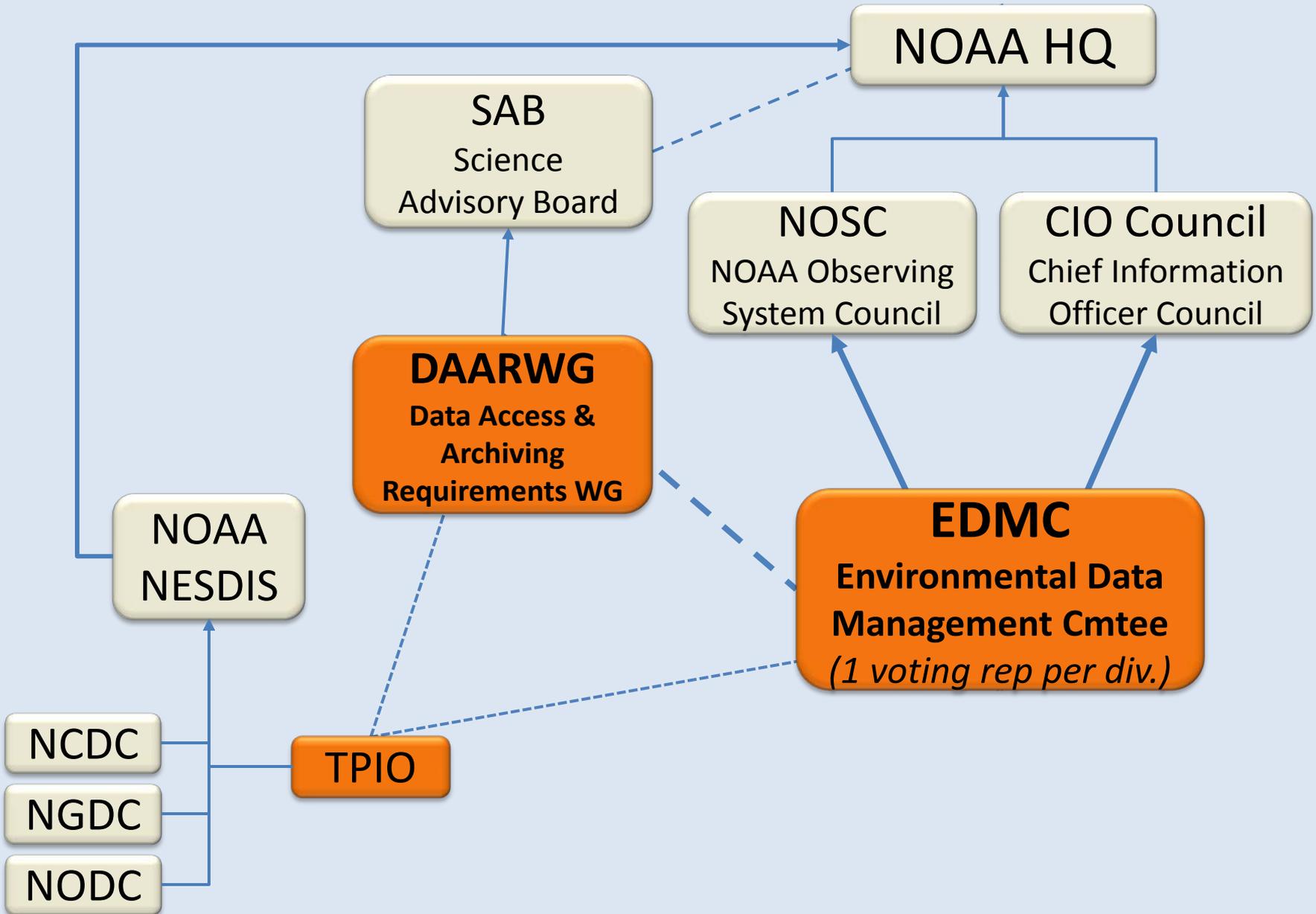
• Preserved



for all types of users and applications.

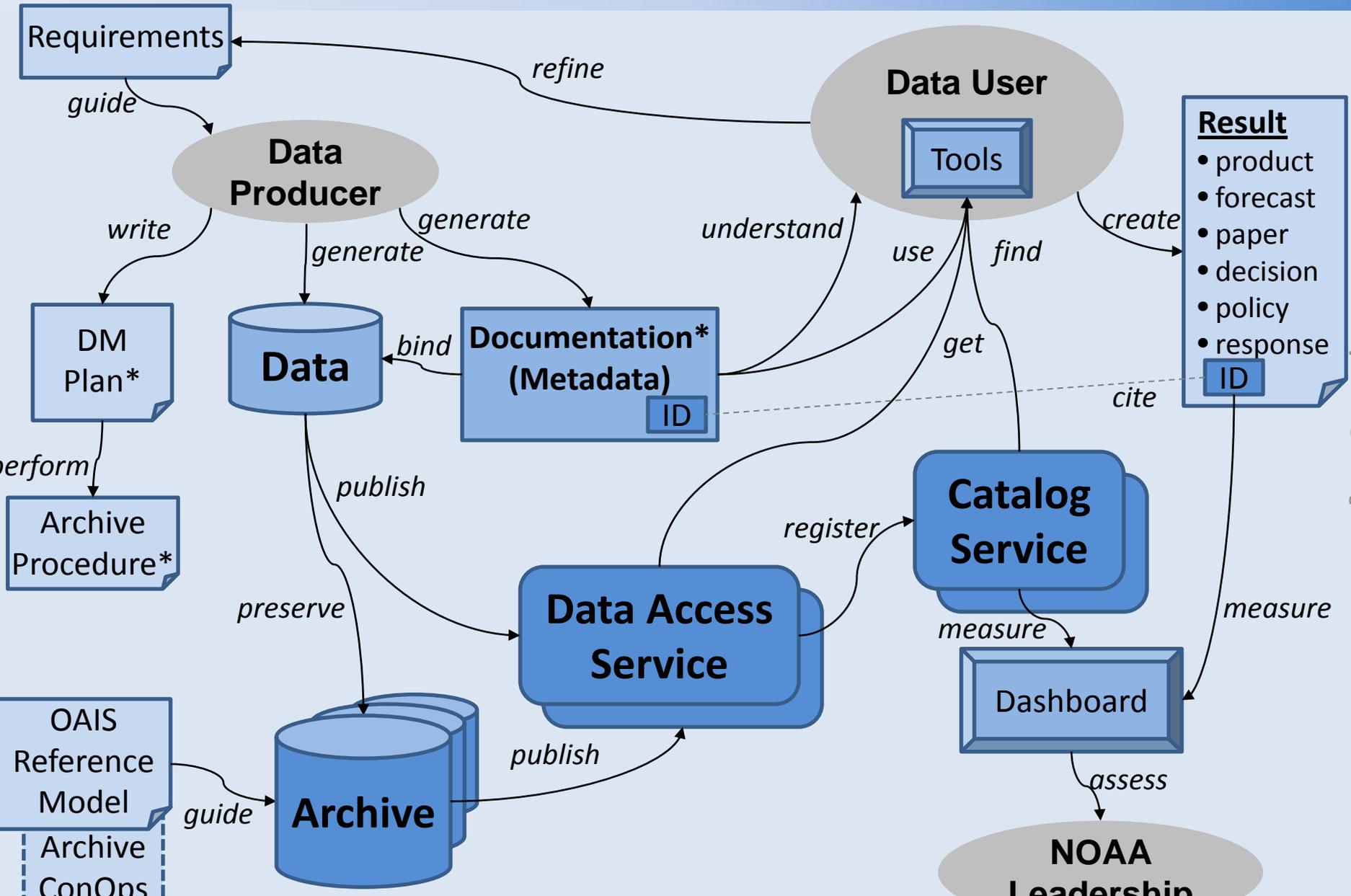


# NOAA DM Organization



# Data Management Concept of Operations

(Not all activities illustrated)



\*EDMC Procedural Directive

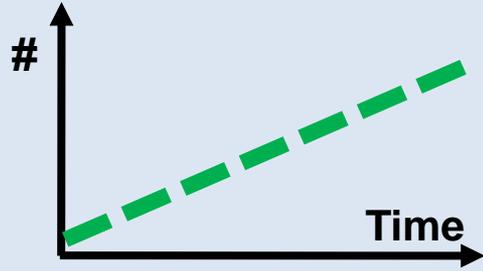
# NOAA Data Management Dashboard Roles

## 1: Know about metadata sources.

**DM Dashboard**

- Local catalog #1
- Local catalog #2
- Metadata WAF #1
- Metadata WAF #2

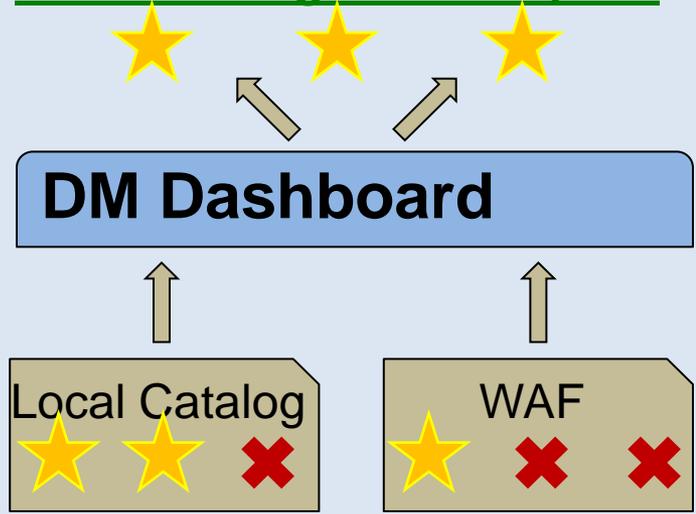
## 2: Produce summary reports.



## 3: Provide feedback to data providers.

- Metadata quality score
- Server compatibility test

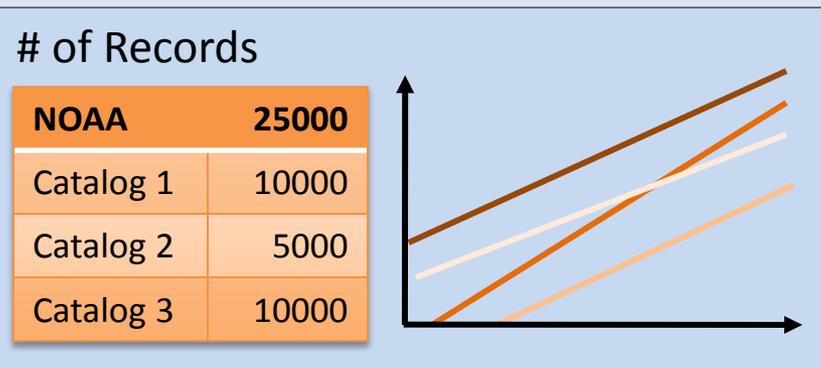
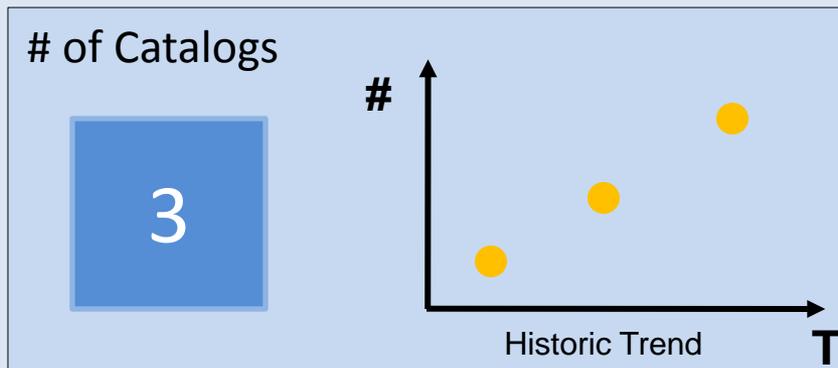
## 4: Publicize good examples.



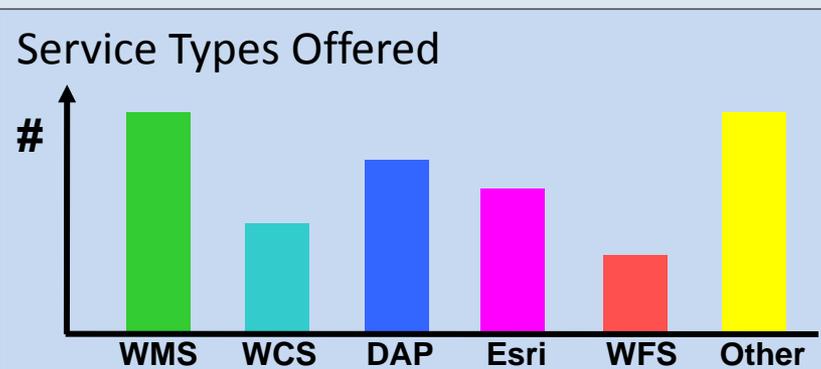
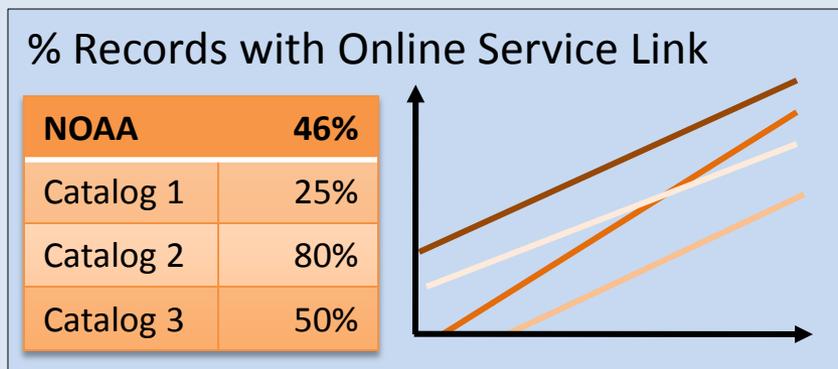
# Mockup: DM Dashboard

Last Update: yyyy-mm-dd

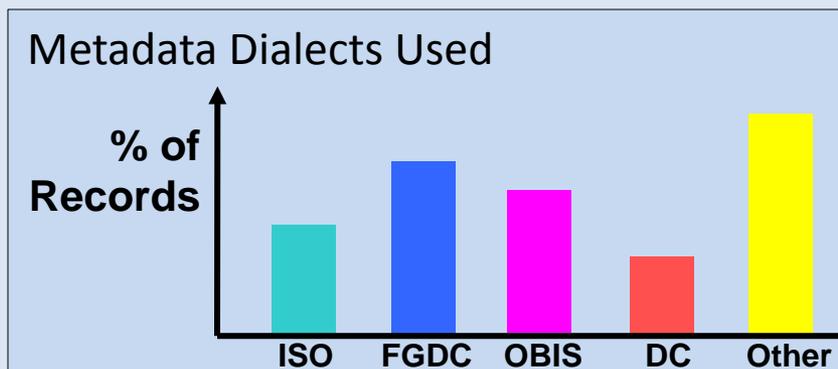
Quantity



Accessibility



Documentation





**NOAA EDM**

# **EDMC Procedural Directives**

Status and Plans

# EDMC Procedural Directives

## Data Management Planning PD

*Plan, in advance, how you will preserve, document and distribute your data.*

### Archive Procedure

*What to archive, how to submit to archive.*

### Data Documentation

*How to apply ISO 19115 metadata for discovery, use & understanding.*

### Data Access & Discovery

*Provide on-line services so your data can be found and retrieved.*

### Data Sharing by NOAA Grantees

*State how you will share data, and share within 2 years.*

### Data Citation

*Use unique identifiers to allow data to be referenced and tracked.*

*In preparation*

# Implementation of Existing PDs

- EDMC Exec Sec & Chair:
  - Establish resources to support PD implementation
    - NOAA EDM Wiki: <http://geo-ide.noaa.gov/wiki/>
    - DM Plan Repository (*link from Wiki*)
    - Informational briefing about PDs (*on Wiki*)
  - Report progress
- EDMC members
  - Meet with NOSC and CIO Representatives to determine the best way to implement the PDs within your Line Office
  - Begin performing initial assessment of current state of compliance with the goals of each PD
  - Report progress & problems to EDMC
- Grants office: Publicize newly-approved Data Sharing PD

# Development of new PDs

- **Data Access and Discovery Procedural Directive**
  - Editor: Jeff DLB
  - ***First draft nominally due FY2012 Q3***
  - Some discussions at EDM Conference
  - Agenda item at this DAARWG (tomorrow)
- **Data Citation Procedural Directive**
  - Editor: *t.b.d.*
  - First draft nominally due FY2012 Q4
  - Useful session at EDM Conference
  - NODC interest in moving forward quickly



# Obstacles to Improving NOAA Data Management

*Possible discussion topics for  
DAARWG*

# Obstacles to improving NOAA EDM

- **Good DM practices and NOAA-wide collaboration are not part of employee job descriptions or recognition methods.**
- **NOAA datasets are numerous and heterogeneous.**
- **NOAA programs are mission-specific and independent.**
  - **Projects tend to be technical & cultural stove-pipes.**
  - **People who approve new projects are not always aware of preferred approaches and policy directives.**
  - **System developers start from scratch rather than first seeking existing solutions.**
- **Changes cost money.**
  - **Savings from standardization and reuse are not visible until later, or may accrue to later adopters.**
  - **Operational systems cannot be readily changed.**
- **Standards are complicated, too general, or too specific to a different purpose.**
  - **Lack of ready-made software, training, automation.**

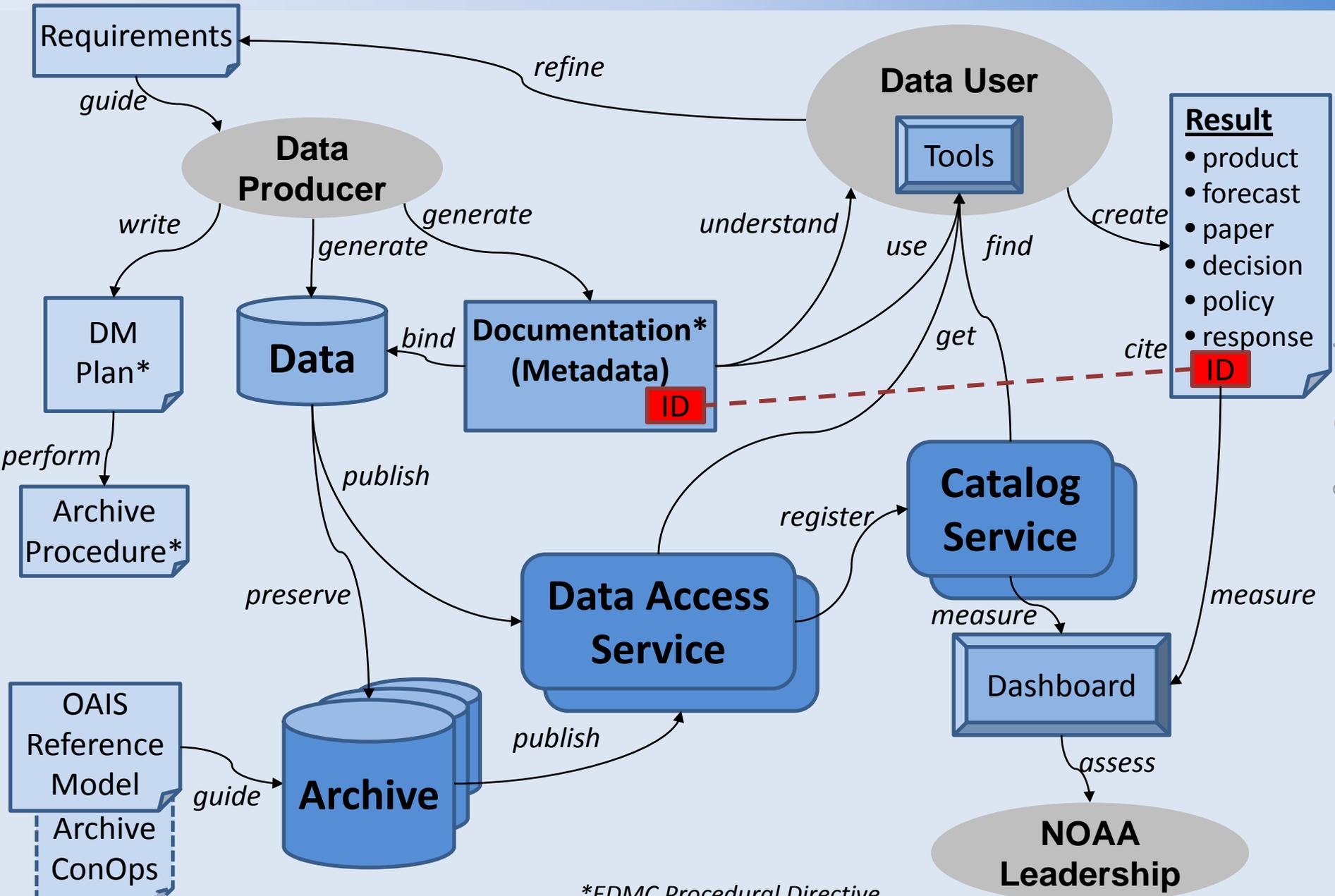


**NOAA EDM**

# Backup Slides

# Data Citation in DM ConOps

(Not all activities illustrated)



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\*EDMC Procedural Directive

# NOAA Data Citation Procedural Directive

- What: Add unique identifiers to dataset metadata
- Why:
  - Enable datasets to be cited in publications or other products
  - Provide credit to producers of datasets
  - Help measure data usage
  - Help detect duplicate entries in search results
- How: see next slide

# NOAA Data Citation PD Plans

- Build on existing work by ESIP Federation, UK Digital Curation Centre, and others
- Obtain NOAA-wide license to mint DOIs (Digital Object Identifier)
- Decide appropriate level of granularity for assigning DOIs
- Notional Schedule:
  - FY2012 Q4: First draft
  - FY2013: EDMC Approval
  - Late 2013: Begin assigning IDs
  - 2014: Start requiring data owners to assign IDs
  - 2015: Recommend users cite with ID
    - Government probably cannot directly require citation.
  - 2015: Work with scientific journals to mandate data citation in publications

# Data Management Architecture - Services Viewpoint

