

# A Tale of Two Networks

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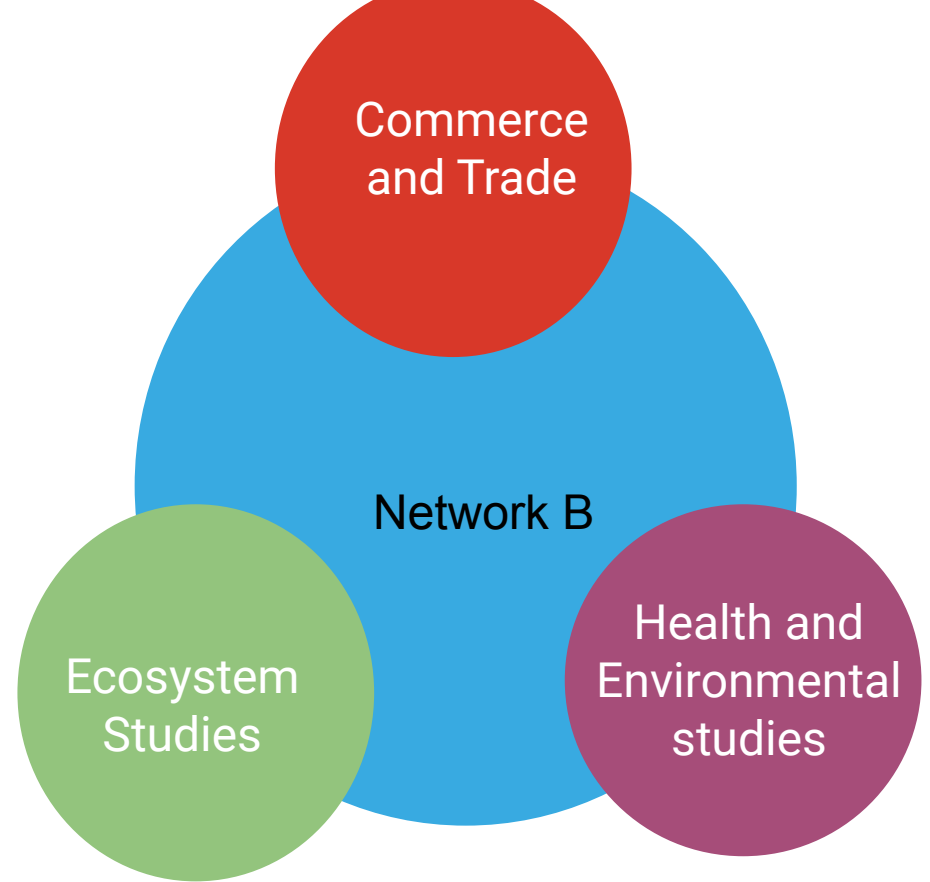
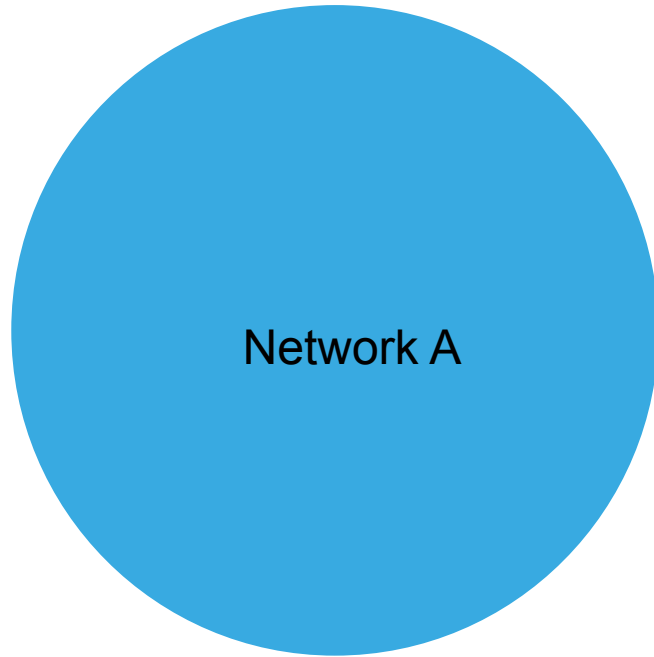
Cooperative Institute for Climate, Ocean and Ecosystem Studies

NOAA

Pacific Marine Environmental Laboratory

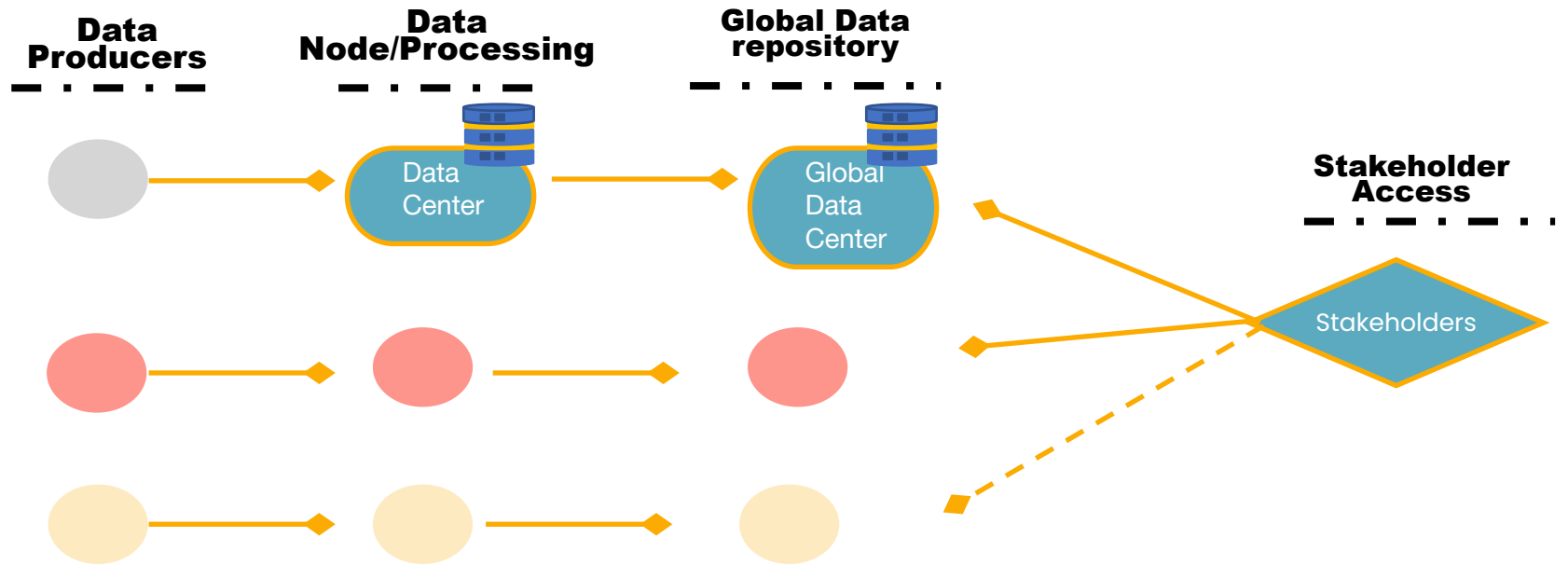


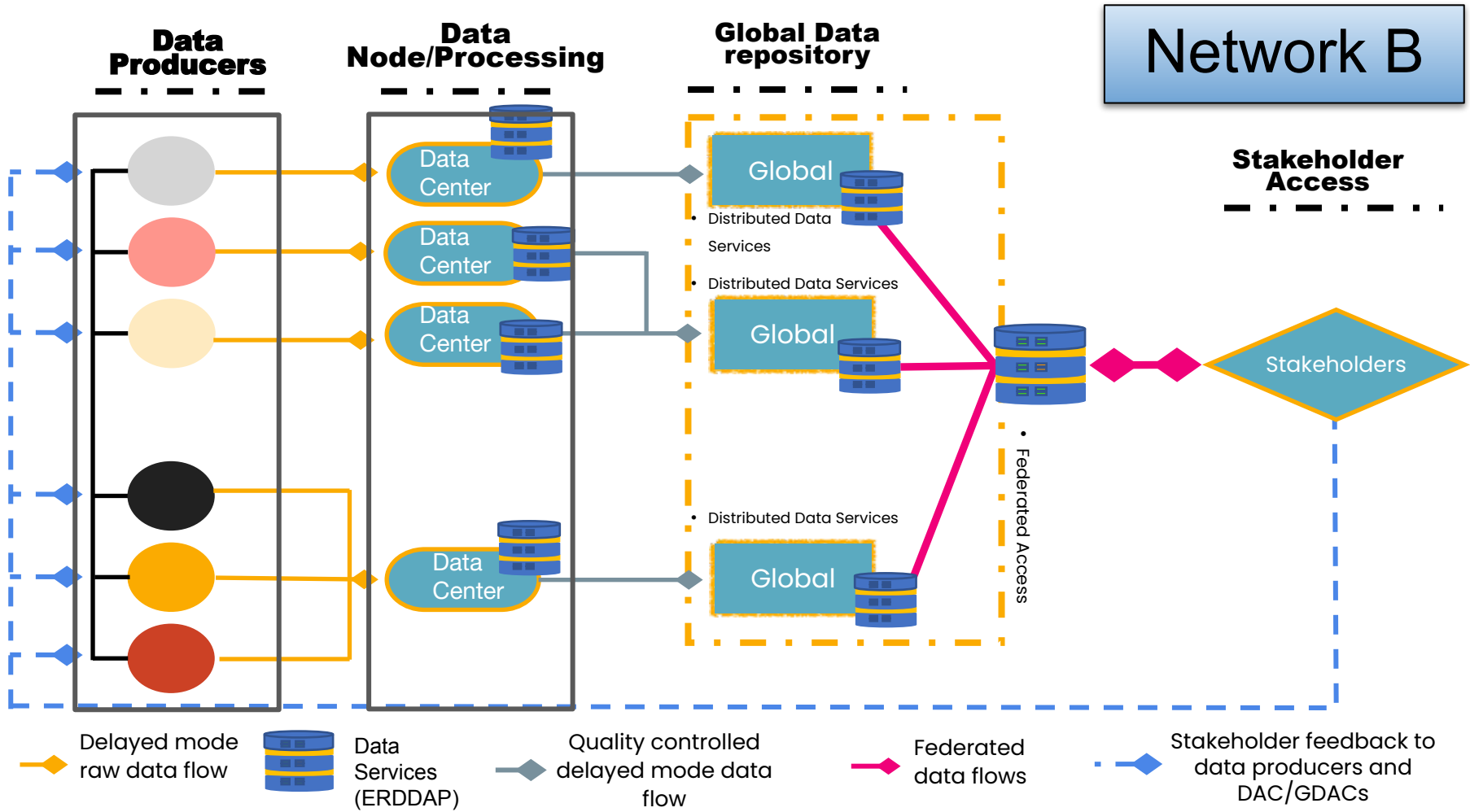
# A Tale of Two Networks



“This is a work of fiction. **Any similarity to actual networks, living or dead, or actual events, is purely coincidental.**”

# Network A



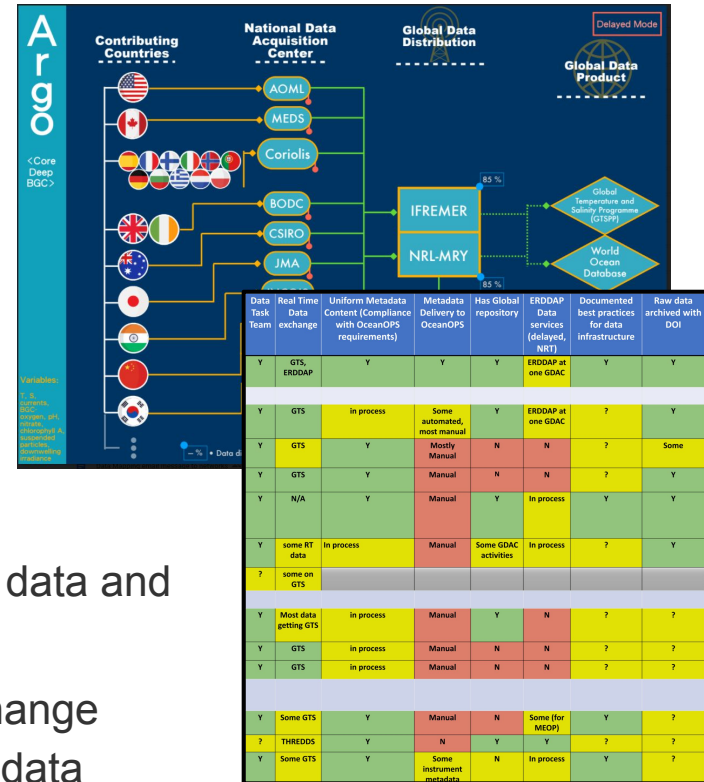


# GOMO and the Global Ocean Observing System

GOMO has been active in improving data management through its support of the GOOS Observations Coordination Group (OCG).

Activities include:

- Open Access to the GTS (see recorded presentation)
- Mapping the data flows of the global networks
  - Identify gaps and opportunities to improve FAIR compliance of data systems
- Data implementation plan development
  - Develop a set of requirements designed to reduce data and metadata friction among the global networks
- Integration with International Oceanographic Data Exchange (IODE) and World Meteorological Organization (WMO) data activities, including policy and strategy development



# Data flows like Network B are ideal, but how?

Some ideas to start the discussion:

- Support development of Community of Practices and the implementation of best practices
  - Need scientists and data managers working together
- Change the way data management is funded
  - Higher level (interoperable) data management should be funded separately than the science project
- Support distributed data systems through federated architectures
- Develop data systems that support the science projects, not burden them
- Develop data systems that the originating science community actually use!

# Discussion



**Global Ocean Monitoring and Observing**  
NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION



# Additional Slides



## OCG data and metadata: **Recommendations**

Real Time Data	Metadata	Delayed Mode	Best Practices
Real Time exchange via the WMO GTS in the approved BUFR formats	Defined uniform metadata content that includes at least minimum OceanOPS requirements	Identified Global Repository	Best Practices documenting data infrastructure and workflows
If possible, Non-GTS real time data should be available via interoperable services (ERDDAP)	Implement metadata transmission to OceanOPS via m2m services	Preferred data products available through ERDDAP services	
	Where possible, metadata should be based upon standard vocabularies (CF, DarwinCore, etc)	Additional (Sensor, provenance) metadata available through global repository	Raw data, delayed mode data and data products should be archived and have DOI assigned for citation and reproducibility
		NetCDF preferred file format, though ERDDAP services can help fill that gap	