

# The DAS RCN and Proposed FDSN Involvement in Standards

## EarthScope Data Services



GAGE  
SAGE

 EarthScope  
Consortium  
Operated by

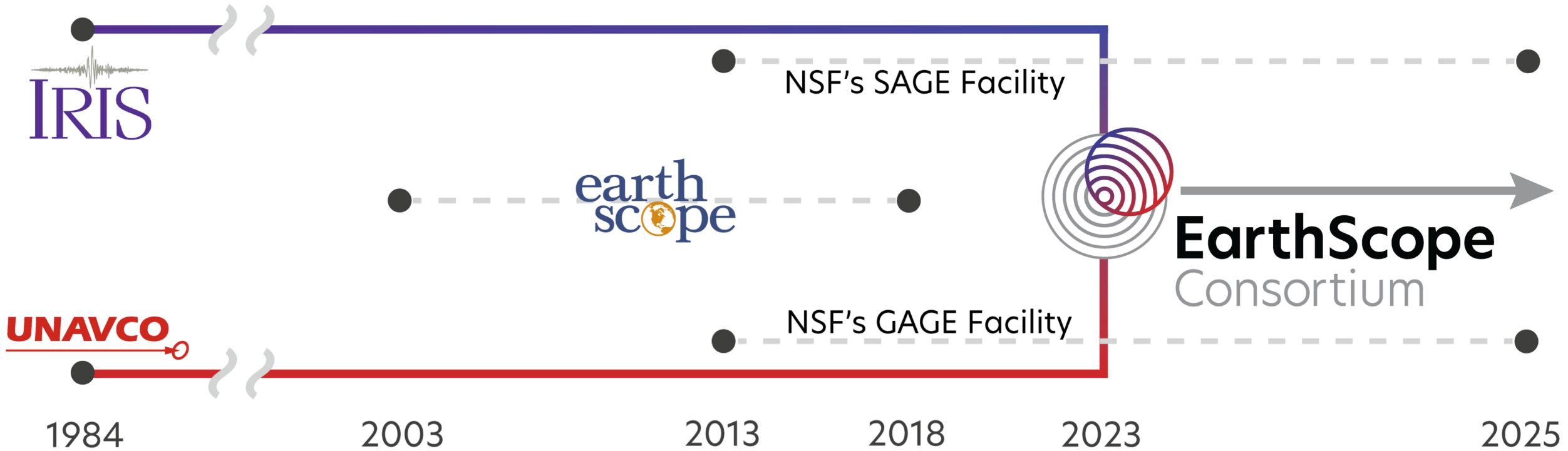
# Transition to EarthScope



GAGE  
SAGE



EarthScope  
Operated by Consortium



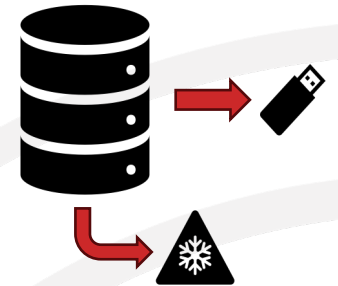
# Takeaway



GAGE  
SAGE

EarthScope  
Operated by Consortium

- **StationXML is not a good fit for DAS metadata (e.g., cable properties) – A DAS metadata standard is needed.**
- **Because DAS datasets can be very large (10s to 100s of TB) it is doubtful that full data sets will be kept online indefinitely – Standard derivative products for federated DAS data centers are needed.**
- **FDSN is the logical international federation to establish and maintain DAS standards.**
- **Recommendation: Form WG development teams to:**
  - **Propose FDSN standards for DAS metadata (WG 2)**
  - **Propose FDSN standards for DAS derivative products (WG 3)**



# Background



The DAS Research Coordination Network\* (RCN) had four main goals:

1. Identify applications of DAS and develop a network of potential DAS users.
2. Train a community of DAS users in the acquisition, handling and processing of DAS data.
3. Identify needed technical development (engineering and scientific).
4. Identify major challenges and next steps for supporting DAS science beyond the RCN.

The 3-year RCN effort will end soon but activities continue.

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# Research Network's Priorities



At a DAS RCN workshop held in June 2023 two of the DAS user community priorities that emerged were:

1. Open, Sustained, and Standard Data Archive/Access [requiring]:
  - Metadata content standards
  - Data format standards
  - Standard reduced data sets derived from original data
2. Continued International Engagement

**FDSN's value as a maintainer of standards has been a great benefit to seismological research for decades**

**➤ Form WG development teams to propose FDSN standards for DAS metadata and DAS derivative products**

# Progress Examples



- **Metadata Content**

- [https://github.com/DAS-RCN/DAS\\_metadata](https://github.com/DAS-RCN/DAS_metadata) \*

Metadata Model White Paper (Mellors, R. J., Hodgkinson, K. M., Hui Lai, V., & the DAS RCN Data Management Working Group)

- **Standardized Data Products**

- Global DAS month (Andreas Wuestefeld)

\* The DAS-RCN Reporting Format for DAS metadata is licensed under the Creative Commons Attribution 4.0 International (CCby4)



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