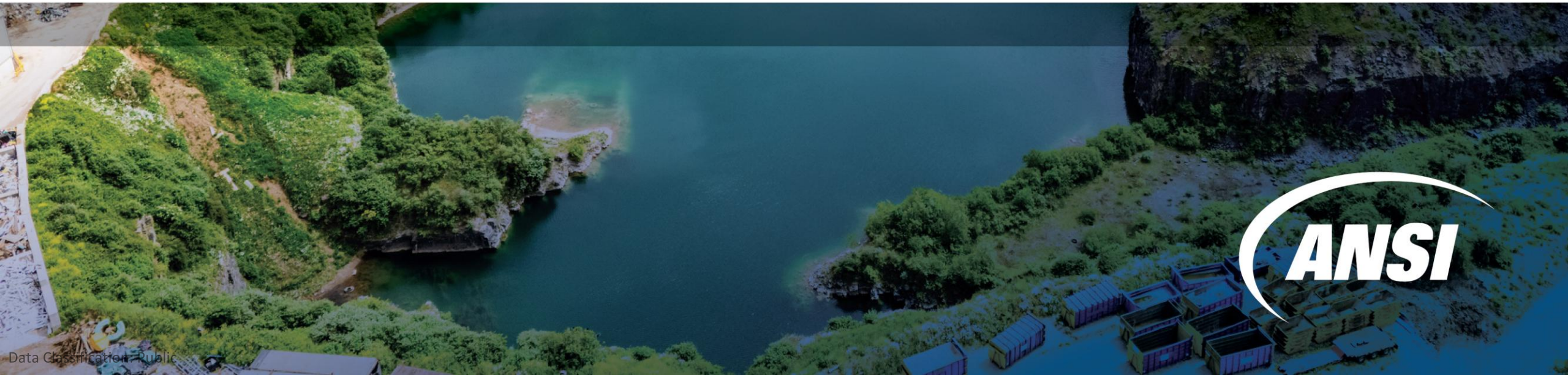




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Data Handling & eLabeling Deep Dive

Moderated by:
Jeff Weiss
Steptoe



? Data Handling & eLabeling Deep-Dive Tasking

- **Examine** the data handling systems, labeling approaches, and information-sharing mechanisms used to communicate critical minerals information across supply chains.
- **Explore** current practices for managing, exchanging, and presenting data, including labeling methods, data carriers, digital platforms, and other tools used by stakeholders to support transparency and information access.
- **Consider** implementation challenges, lessons learned, and the role of standards in promoting consistency, interoperability, and effective communication of critical minerals information.

1 Desired-End State

- *What are stakeholders seeking to achieve, and how do needs differ across upstream, midstream, and downstream activities?*
- *What capabilities are currently in place, and what additional capabilities are needed to support consistent implementation?*
- *What does U.S. leadership in the global market look like, and what are the indicators of success?*
 - *How does effective **data handling & eLabeling** strengthen U.S. leadership in the global market?*
 - *Leadership in standards? Are we there yet?*
 - *Leadership in the market? Are we there yet?*
- *What role do standards play in the desired end-state?*

Critical mineral information is securely exchanged through interoperable digital systems that provide trusted, standardized, and accessible data throughout the supply chain.

Key Characteristics:

- Common data models
- Digital interoperability
- Secure information exchange
- Consistent data definitions
- Product identification and authentication (anti-counterfeiting)
- Scalable industry adoption

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Compliance Expectations | Data Handling & eLabeling

- *What regulatory frameworks, trade requirements, and conformity assessment approaches (e.g., testing, verification, inspection, certification, audit) apply?*
 - *Do these approaches leverage standards? Which?*
 - *How do these approaches affect (enable or hinder) standards implementation?*
 - *Where do stakeholders encounter inconsistencies or challenges across jurisdictions or systems?*
- *What specific use cases should be considered? How do requirements differ across supply chains?*

Feedback Prior to Workshop:

1. EU Digital Product Passport
2. Battery Passport initiatives
3. UN Transparency Protocol efforts
4. Supply-chain reporting requirements
5. Data security and privacy obligations
6. Other?

Workshop Whiteboard:

1. Discussion captured here
2. Discussion captured here

- *How are standards applied today? Is it effective implementation?*
- *What challenges have stakeholders encountered when implementing measures in practice?*
- *What factors (e.g., technical, operational, or commercial) limit adoption across different stages of the value chain?*

Feedback Prior to Workshop:

1. Multiple incompatible platforms
2. Data ownership concerns
3. Commercial sensitivity constraints
4. Limited interoperability
5. Lack of common reporting formats
6. Other?

Workshop Whiteboard:

1. Discussion captured here
2. Discussion captured here

- *What standards or frameworks currently support this area, and how are they applied?*
 - *Organization level feedback is a great start!*
- *Where are gaps or inconsistencies observed across existing standards or systems?*

Standards Utilized:

1. IEC 62474
2. IPC traceability standards
3. UNTP
4. SAE J3327
5. Discussion captured here
6. Discussion captured here

Gaps :

1. Common data architecture
2. Digital identifiers
3. Secure data-sharing protocols
4. Product-level declaration frameworks
5. Cross-system interoperability
6. Discussion captured here
7. Discussion captured here

- *Where is alignment needed between standards, regulatory frameworks, and industry practices to support this area?*
- *What challenges exist in ensuring interoperability across systems, data formats, or supply chain participants?*

Feedback Prior to Workshop:

1. Common digital data model
2. Alignment across passports and traceability systems
3. Harmonized metadata requirements
4. Shared reporting formats
5. Cybersecurity consistency
6. Other?

Workshop Whiteboard:

1. Discussion captured here
2. Discussion captured here

- *What data, definitions, or technical inputs are needed to support effective systems?*
- *Are there areas where additional work is needed before standards can be developed or more widely implemented?*

Feedback Prior to Workshop:

1. Standard data schemas
2. Facility-level data models
3. Shared terminology
4. Verification methodologies
5. Digital trust frameworks
6. Other?

Workshop Whiteboard:

1. Discussion captured here
2. Discussion captured here