

EQUS™

Data Governance Checklist



EarthSoft works with organizations to establish EQUS Data Governance programs based upon their business goals and drivers and data principles. This checklist provides an overview of data governance elements that are important for maximizing investments in their EQUS data management system.

Organizational Framework

- Define roles and responsibilities relating to data governance and data management.
- Gather contact information for all stakeholders (e.g., organizational contacts, subject matter experts, laboratory contacts, field data collectors, data users, regulatory agency contacts, contractor contacts, and EarthSoft contacts).

Create Data Policies

- Data Acquisition** – Ensures data uploaded to EQUS are fit for use. Defines use of EQUS Collect or EDGE.
- Data Integrity** – Ensures data in motion between the EQUS ecosystem and other systems are transferred in a secure way from known authenticated sources that can be audited.
- Data Security** – Addresses EQUS Facility and User permissions, use of EQUS REST API, and data exports. Determines who will host and provide IT support for EQUS database.
- Data Quality** – Ensures high-quality data, which are accurate, complete, consistent, reasonable, timely, and valid. Describes use of EDP, SPM, and DQM.
- Data Use and Sharing** – Ensures data are not misused or abused, and are used ethically, according to any applicable law, and with due consideration for individual privacy.

Data Management Workflow Review

- Examine current data workflows and identify desired improvements. The workflows should maximize use of electronic exchanges of data between field and laboratory personnel (e.g., use of Collect Data Form, eQuote, eCOC, and eSRN). Includes:
 - Planning for data collection
 - Performing field data collection (manual and automated data logging)
 - Processing for laboratory data analysis and review
 - Assessing, reporting, and/or visualizing the collected data
- Identify responsible party or parties for performing each workflow step.
- Identify EQUS application(s) for each workflow step.

Reference Data

- Identify and upload the desired Reference Values to EQUIS reference tables.
- Populate Reference Values for DQM and SPM as well as Action Levels.

EQUIS Format Files and EDD Generation

- Determine which standard EQUIS format file(s) will be used or if custom format file(s) are needed to submit the organization's field and analytical transactional structure as well as operational metadata.
- Identify current laboratory electronic deliverables and assess laboratory capabilities (LIMS) to meet EQUIS requirements.

Document and Content Management

- Determine whether/how unstructured data (e.g., photos, documents) will be stored in EQUIS or other content management systems.
- Develop unstructured data retention and storage policies.

Training and Communication

- Develop organizational communication strategy relating to EQUIS data governance that includes data policies, standards, and processes.
- Assess training needs; identify who needs to be trained and at what level.
- Determine plan and schedule for hands-on training.

Establish Metrics

- Data Quality
- Cost, compliance, and quantity
- Data storage and usage
- Key Performance Indicators

Historical Data Migration

- Identify existing data sources (e.g., databases, spreadsheets, PDF files, paper reports or logs, etc.) and any data gaps.
- Determine which data sources will be migrated to EQUIS and identify data mapping requirements. Consider data completeness, relevance, and integrity when deciding which data to migrate.

Data Integration and Interoperability

- Identify third party applications (e.g., GIS, CAD, modeling, etc.) that will use EQUIS data and determine interfacing/exporting requirements.
- Examine EQUIS REST API usage for EQUIS data connectors (Microsoft Power BI, ArcGIS), other data exchanges, and data automation.
- Determine use of EQUIS Information Agents

Issue Management and Change Management

- Develop Issue Management process for identifying, quantifying, prioritizing, and resolving data governance related issues.
- Determine Change Management procedures to implement the EQUIS Data Governance within the organization. Identify key steps as well as the timing and schedule for each step.

Contact EarthSoft at info@earthsoft.com for more information about EQUIS Data Governance.