

Asset Information Managers' Forum

June 2024

Agenda

Start	Topic
9.30am	Round table / introductions
10:00am	Recap on purpose of the AIMF and last year's outputs. Planning for remainder of day – confirm agenda
10:30am	Break
11:00am	Discussion Topic 1: Data requirements for DSO
11:30am	Discussion Topic 2: Strategies for managing LV network data
11:50am	Discussion Topic 3: Aligning GIS models
12.10pm	Lunch break
1.00pm	Discussion Topic 4: Subsurface / underground digital twin
1.30pm	Discussion Topic 5: Data quality & governance
2:00pm	Discussion Topic 6: Commerce Commission update
3:00pm	Break
3.15pm	Discussion Topic 7: Data standard for asset management - ISO55013
3:45pm	Future direction and wrap up
4.00pm	End

Purpose

1. Develop and agree standards, guidelines and maturity assessment for managing asset information.
2. Hold an annual workshop to understand how other asset information managers from electricity generation, transmission and distribution are dealing with challenges that are common across the industry.
3. Create relationships that are useful when making contact throughout the year to discuss issues that affect other organisations in the industry.
4. Create alignment across industry
5. Give visibility to asset information topics
6. Ensure future readiness through working together
7. Improve outcomes for customers through improve use of asset information

Actions & Summary From Last Forum

1. AM and AIMF session together was good (today and yesterday)
2. FENZ – subgroup has been formed and outputs circulated for wildfire risk,
 - Anthony will provide to Jules, Jules to share with attendees
 - This may not be updated regularly
3. CIO forum:
 - More generic – not Asset Management specific
 - Overlap from a system a perspective, including integration
 - Doesn't cover data standards although CIM has been discussed.
4. Create a terms of reference for this Asset Information forum, including the forum's scope.

It is recommended that attendees join the LinkedIn group for this forum:

NZ Electricity Utilities - Asset Information

<https://www.linkedin.com/groups/13601353/>

Topics Raised but Not Covered Due to Time Constraints

Topics raised before or during forum, which were not discussed in detail and could be covered in a subsequent forum:

1. Easy access to ICP consumption data (who is using this data and how are they using this?)
2. Implementing CBRM raises questions that other networks will also be encountering if they go down the risk management path. These questions include:
 - How should we manage our crossarms? They aren't really an asset but bare the highest risk of failure.
 - Issues sourcing data to calculate risk from multiple sources. E.g. flood models, wind zones and corrosion zones. Is there an industry standard or guide to source spatial data to calculate risk from for these models? E.g. NIWA, FENZ, LINZ.
3. What to record and time expectation for records being returned from the field. E.g. if commissioning an asset – what is an acceptable time frame. Standardisation would be useful, while allowing for some variation , e.g. contractor, versus in house; simple versus complex jobs. What are people happy with and are they seeking to improvement?
4. LV visibility - what are others doing?
5. Provide a vision of what good looks like for as built in terms of systems integrated. What is the role of BIM?
6. Is there funding available? Asset information affects risk. EEA AMG members can prioritise funding.
7. Fixed asset implications of asset information – capturing information for accounting purposes

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Discussion Topic 1

Data requirements for DSO

Adrian

Discussion Topic 2

Strategies for managing LV network data

Chris

Discussion Topic 3 Aligning GIS models

David

Discussion Topic 4 Subsurface / underground digital twin

Denise

Discussion Topic 5

Data quality & governance

Jeroen

Discussion Topic 6 Commerce Commission update

Claire

Discussion Topic 7
Data standard for asset management -
ISO55013

Jules

DRAFT INTERNATIONAL STANDARD

ISO/DIS 55013

This document gives guidelines for managing data to support an organization in meeting its asset management objectives and by extension its organizational objectives.

<p>Introduction</p> <p>1. Scope</p> <p>2. Normative references</p> <p>3. Terms and definitions</p> <p>4. Managing asset data</p> <p style="padding-left: 20px;">4.1 General</p> <p style="padding-left: 20px;">4.2 Asset data</p> <p style="padding-left: 20px;">4.3 Documented information</p> <p style="padding-left: 20px;">4.4 Data life cycle stages</p> <p>5. Delivering value from asset data</p> <p style="padding-left: 20px;">5.1 Asset data’s role in decision making</p> <p style="padding-left: 20px;">5.2 Usefulness of asset data</p> <p style="padding-left: 20px;">5.3 Align with prevailing data standards</p>	<p>6. Identifying data assets</p> <p style="padding-left: 20px;">6.1 Introduction</p> <p style="padding-left: 20px;">6.2 Factors identifying data assets</p> <p>7. Managing data assets</p> <p style="padding-left: 20px;">7.1 General</p> <p style="padding-left: 20px;">7.2 Identify data related to each organizational objective and strategy</p> <p style="padding-left: 20px;">7.3 Assess data availability</p> <p style="padding-left: 20px;">7.4 Applying asset management to data assets</p> <p style="padding-left: 20px;">7.5 Interoperability of the data asset</p> <p style="padding-left: 20px;">7.6 Digital preservation</p> <p>8. Governance</p> <p style="padding-left: 20px;">8.1 General</p> <p>ANNEX A (INFORMATIVE) Data asset examples</p> <p>ANNEX B (INFORMATIVE) Data activities</p>
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7.5 Information requirements

The organization shall determine its information requirements to support its assets, asset management, asset management system and the achievement of its organizational objectives. In doing this:

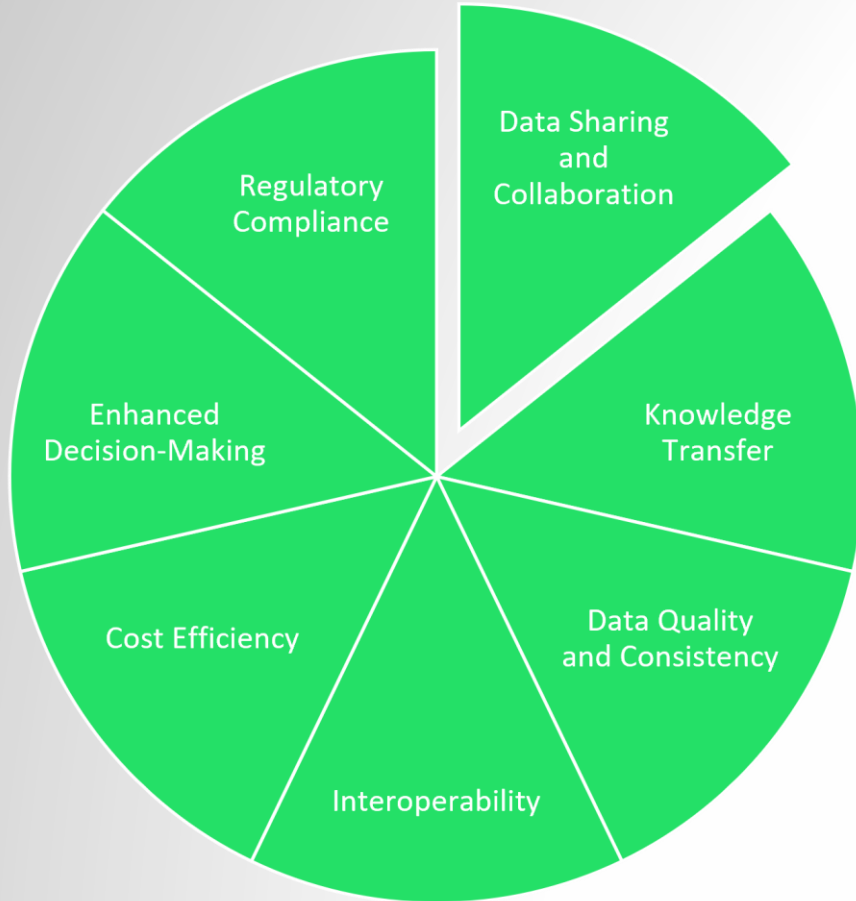
- a) the organization shall include consideration of:
 - the significance of the identified risks;
 - the roles and responsibilities for asset management;
 - the asset management processes, procedures and activities;
 - the exchange of information with its stakeholders, including service providers;
 - the impact of quality, availability and management of information on organizational decision making;
- b) the organization shall determine:
 - the attribute requirements of identified information;
 - the quality requirements of identified information;
 - how and when information is to be collected, analysed and evaluated;
- c) the organization shall specify, implement and maintain processes for managing its information;
- d) the organization shall determine the requirements for alignment of financial and non-financial terminology relevant to asset management throughout the organization;
- e) the organization shall ensure that there is consistency and traceability between the financial and technical data and other relevant non-financial data, to the extent required to meet its legal and regulatory requirements while considering its stakeholders' requirements and organizational objectives.

Some other data standards

Standard	Overview	Geography	Uses	Structure	Scope
IEC CIM	The Common Information Model (CIM) is an electric power transmission and distribution to allow application software to exchange information about an electrical network. The CIM consists of three IEC standards: 61970, 61968, and 62325.	Global	Data exchange for ADMS and power flow modelling	Structure	Electrical
BIM (ISO 19650)	Building information modeling (BIM) is a process involving the generation and management of digital representations of the physical and functional characteristics of buildings and other physical assets.	Global	Enable multiple contractors to work on an organisation's asset	Process	General
ABAB AIR	Australasian BIM Advisory Board Asset Information Requirements Guide: Information required for the operation and maintenance of an asset	Australia / NZ	Forming a set of asset information to be provided by contractors under a BIM approach	Structure	General
Open ADR	The OpenADR (Open Automated Demand Response) is a two-way information exchange model to standardize, automate, and simplify Demand Response (DR) and Distributed Energy Resources (DER)	Global	Enable electricity providers to communicate DR signals directly with customers	Structure	Electrical
EIEP	Electricity information exchange protocols (EIEPs) facilitate the regular or large volume exchange of electricity information between traders and distributors	NZ	Exchange electricity information between traders and distributors	Structure	Electrical
ICCP (IEC 60870)	Inter-Control Center Communications protocol is the de facto standard worldwide for control-center communication in the electric power sector.	Global	Enables Transpower to exchange real-time data with its customers	Structure	Electrical

Asset management data standard for the NZ electricity sector

Benefits of Standardising Asset Data Models



Examples from other sectors:

- Rooding
- Water

The following actions were agreed at the November 2023 forum:

1. EEA will set up a shared online space for this forum.
2. Andrew Chalmers proposed the development of industry standard:
 - Glossary
 - Asset classification hierarchy
 - A data model
3. A target was agreed for collectively populating an industry glossary by 31 December 2023
4. Organisations may want to forum a sub group and/or data standards around common systems used. At this link is the list of the systems used by each EDB:
<https://otse.co.nz/en/misc/edb-tech-stacks>

Future direction and wrap up

No	Item for further work	Action
1	Obstacles to obtaining the data needed and the benefits if it was accessible	Call for interest for people who are interested in progressing
2	LV Data Model development.	Call for interest for people who are interested in progressing. Create topic in the EEA Knowledge Network.
3	Aggregating ICP data for a transformer	EEA will ask Robin Pittwood to share information on this with Asset Information Forum
4	LiDAR / Remote sensing / image capture users group	Create topic in the EEA Knowledge Network.
5	GIS - selection and implementation	Create topic in the EEA Knowledge Network
6	Data hub	Begin with scoping to identify outcomes sought. Call for interest for people who are interested in progressing. Create topic in the EEA Knowledge Network.
7	EEA Knowledge hub – requirements	Set up asset information area and circulate details to Asset Information Forum
8	Standardise risk definitions	EEA with look at initiating a review of EEA criticality guide.

Linkedin: NZ Electricity Utilities - Asset Information <https://www.linkedin.com/groups/13601353/>

Speakers

Speaker	Title	Details
Jeroen Hoexum – Aurora Energy	Data Quality & Governance	A discussion on data quality & governance framework including using a data quality register, a triage processes, alignment to the utility Common Data Model and understanding data lineage
Adrian Nadan – Counties Energy	Information requirements for DSO	A discussion on the asset information required to support operating as a DSO
Chris Franks - Vector	Strategies for managing LV network data	What strategies are being used for managing LV network data, and how this is supporting their future LV strategy. What requirements are organisations seeing for LV data, how are they managing that data today and their plans for the future.
Lunch		
Denise & Anthony – Wellington City Council	Subsurface digital twin	An update on the subsurface digital twin / underground asset map being used in Wellington and to be rolled out nationally
Jules Congalton	Overview of the new data standard for Asset management - ISO55013 – “Applying asset management to data assets”	An overview of the purpose of the standard and how it could be used to assist the electricity sector
Claire Harkess & Katarina Dankova - Commerce Commission	Commerce Commission Performance Accessibly Tool and information disclosure requirements changes	Commerce Commission representatives will present on changes with the Performance Accessibly Tool and the recently (February 2024) targeted information disclosure requirements changes
Break		
David Everett - Mainpower	Aligning GIS models	At last year’s forum, a number of attendees were planning to, or in the process of migrating their GIS model. A discussion on learnings and the potential to align GIS models.