

Asset Management System

Overview for the Customer Forum



Objective of today's presentation

- ▶ **Context:** Asset management decisions underpin asset investment programs and expenditure forecasts, which are key elements of the EDPR. A sound framework for asset management investment decision making is fundamental to ensuring forecast expenditures are prudent and efficient.
- ▶ **Objective:** To provide an overview of how AusNet Services manages assets and makes asset management decisions. Detail of the investment programs is not covered.

Agenda

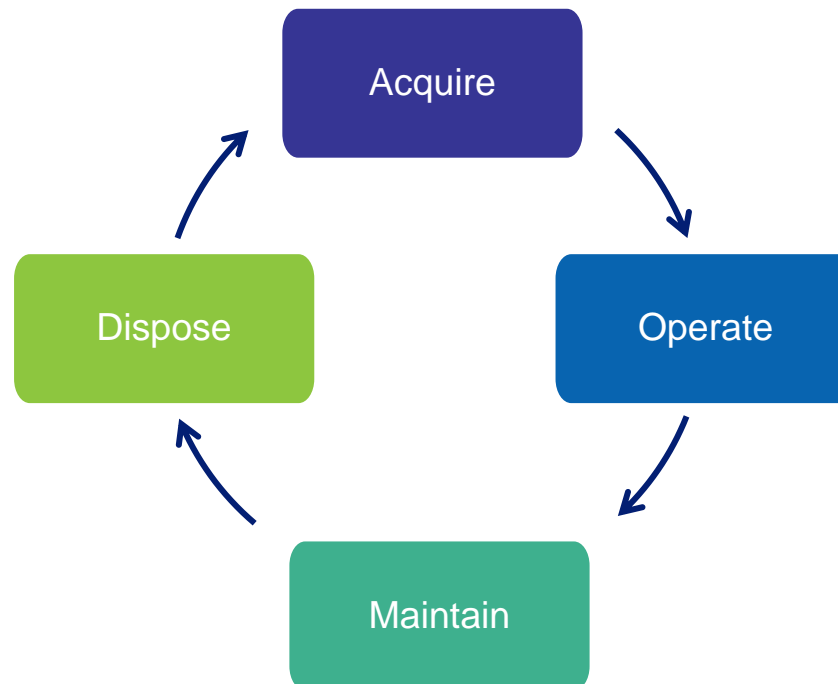
1. **What is asset management?**
2. **Our asset management journey**
3. **Asset management policy and objectives**
4. **Asset management decisions**
5. **EDPR implications**

1. What is asset management?



What is asset management?

- ▶ The life cycle management of physical assets to achieve the stated outputs of the enterprise
- ▶ Asset management translates the organisation's objectives into asset-related decisions, plans and activities, using a risk based approach



What are the benefits of asset management?



▶ The benefits of asset management can include:

- › Improved services and outputs
- › Improved efficiency and effectiveness
- › Informed asset investment decisions
- › Managed risk
- › Improved financial performance
- › Demonstrated social responsibility
- › Demonstrated compliance
- › Enhanced reputation
- › Improved organisational responsibility

International standard on asset management



- ▶ International standard ISO 55000 series provides an overview of asset management, its principles and terminology and the expected benefits for adopting asset management
- ▶ The standard specifies requirements for an *asset management system* within the context of an organisation
- ▶ Organisations can choose to become accredited to this standard in the same way as other standards such as:
 - › AS 4801 Health and Safety
 - › ISO 9001 Quality
 - › ISO 14001 Environment

▶ Why become accredited?

To demonstrate to customers, shareholders and regulatory bodies that we are following asset management best practices and realising the benefits of asset management

What is an asset management system?

► **An asset management system is a set of interrelated and interacting elements of an organisation to establish:**

- › An asset management policy
- › Asset management objectives
- › Processes to achieve those objectives

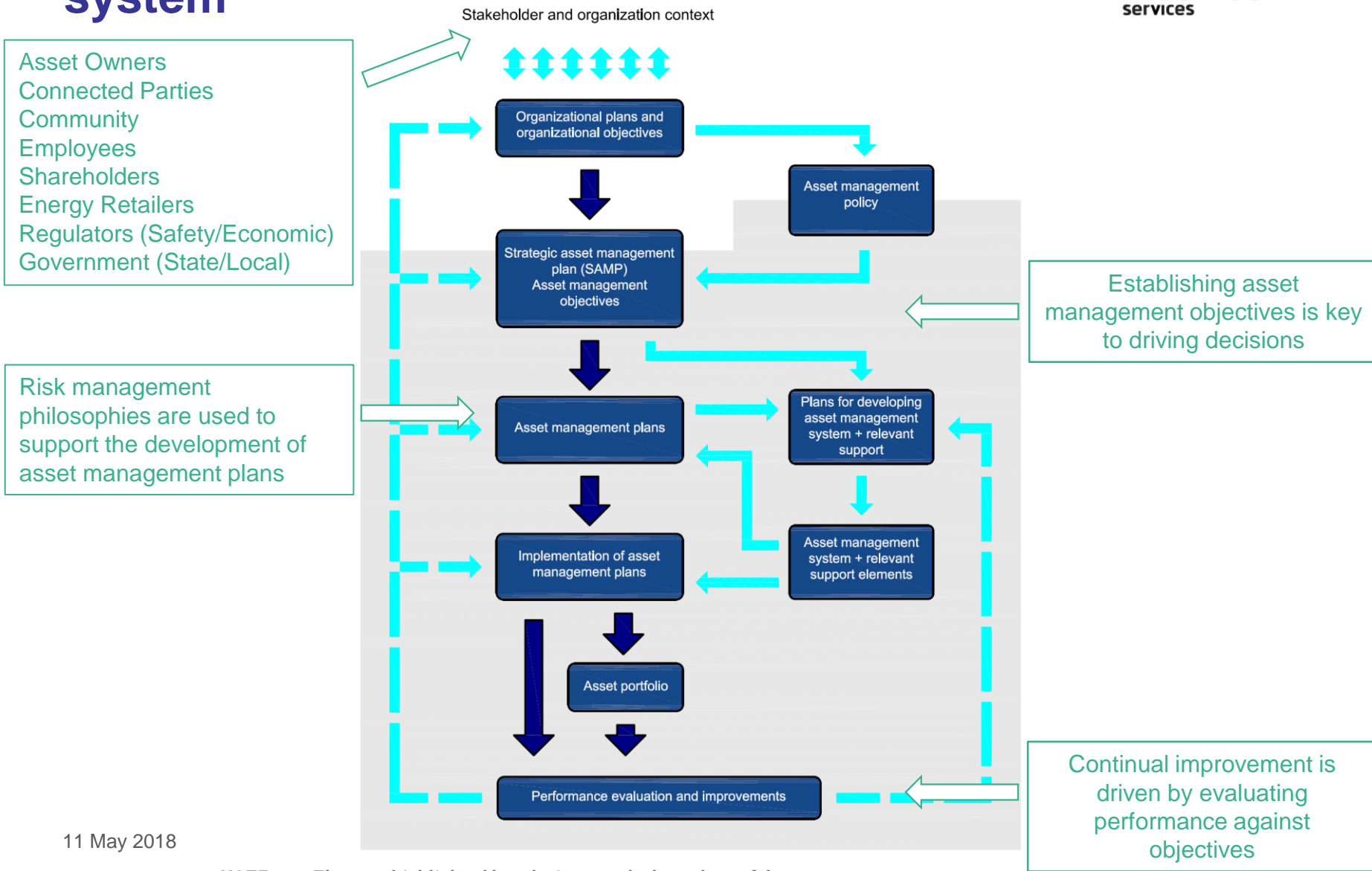


Relationship to other management systems

- ▶ The asset management system is part of a suite of management systems which complement and support each other to deliver the organisation's objectives



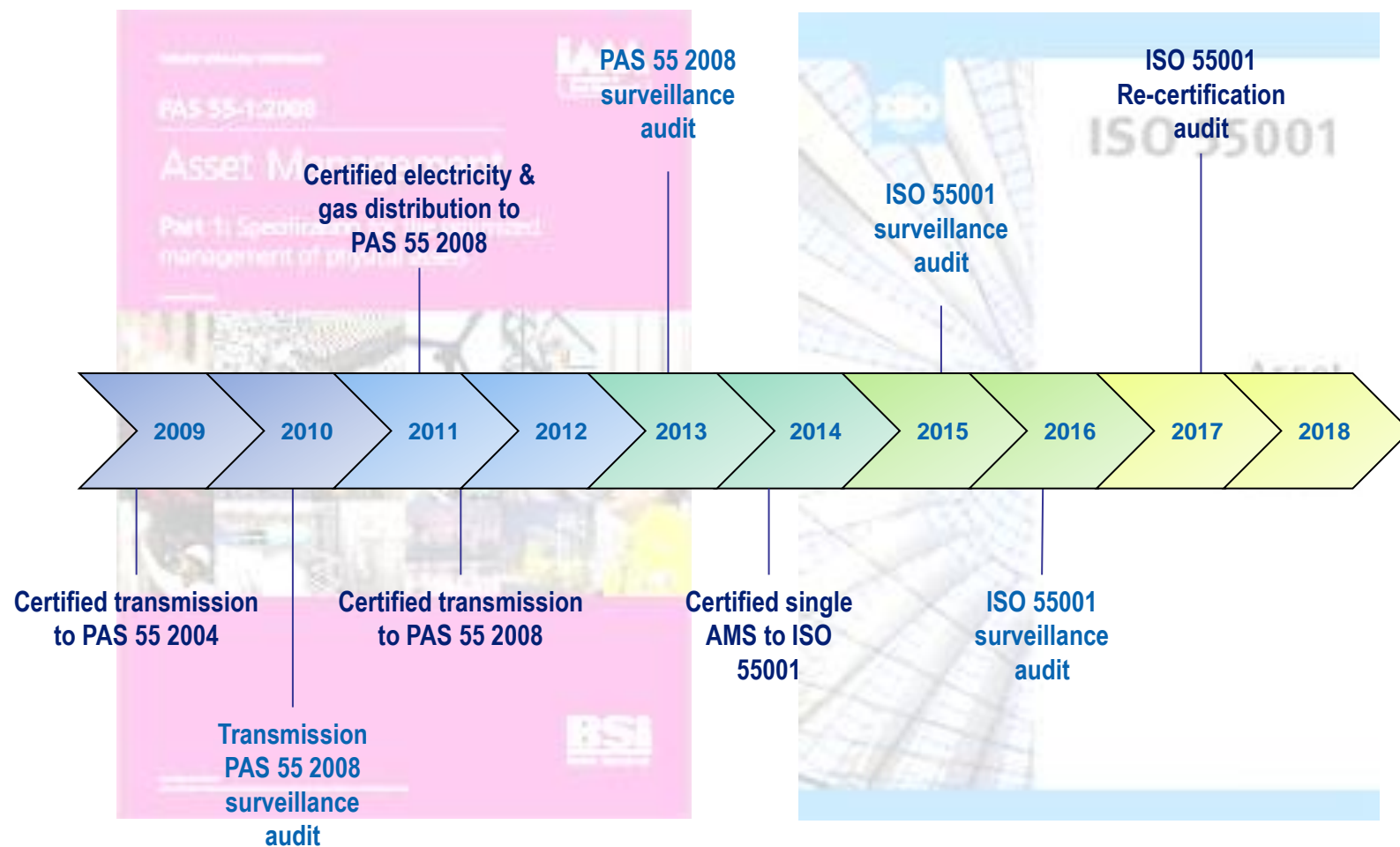
Key elements of an asset management system



2. Our asset management journey

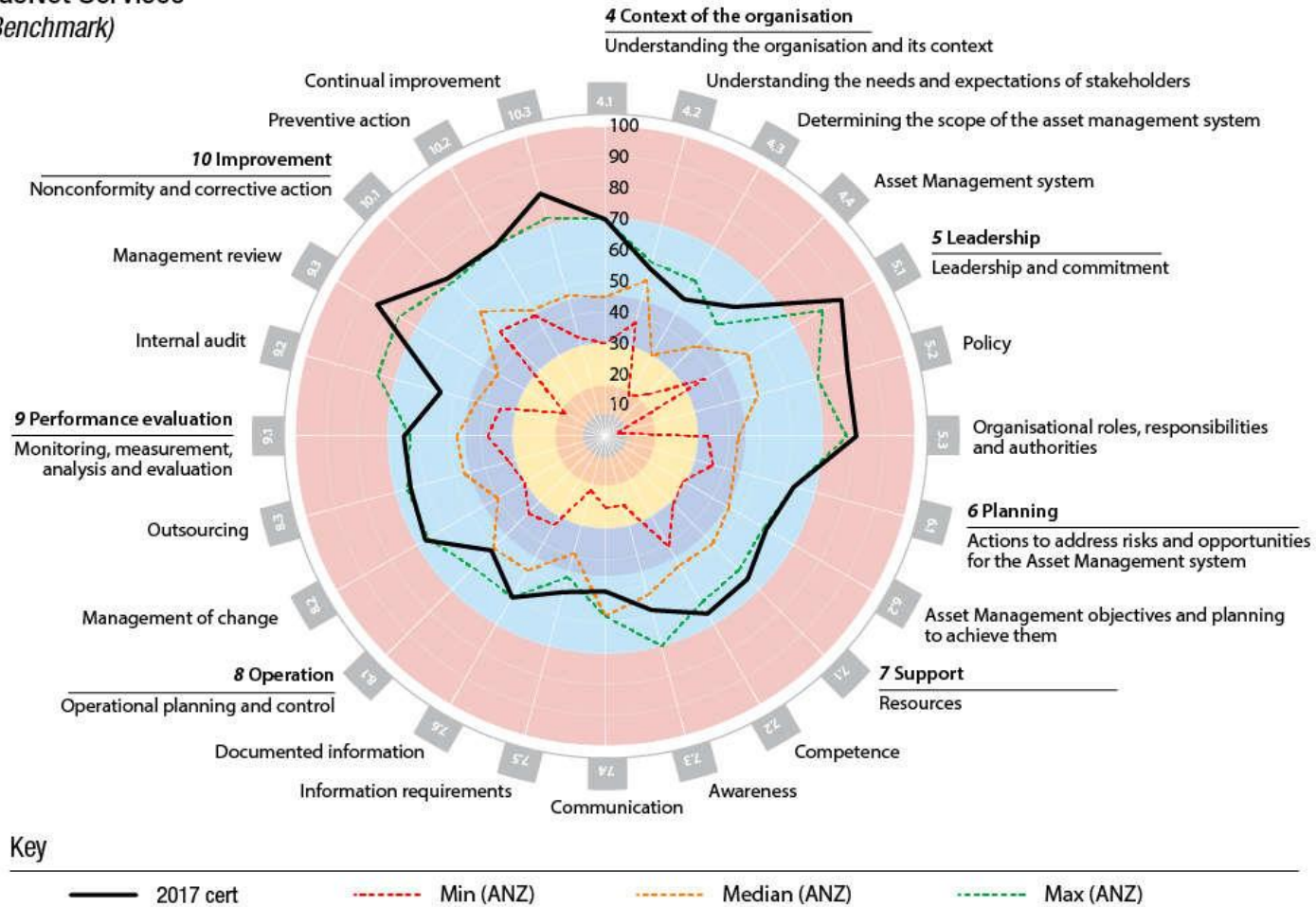


Our asset management journey



Asset management maturity

AusNet Services
(Benchmark)



3. Asset management policy and objectives



AusNet Services' asset management policy



Empower communities and their energy future

This policy directs the content and implementation of asset management strategies, objectives and plans for AusNet Services' energy delivery networks. It guides employees, contractors, suppliers and delegates in each asset management decision.

Sound risk management and the continuous improvement practices of our integrated safety, health, environment, quality and asset management systems will manage the complete life cycle of network assets.

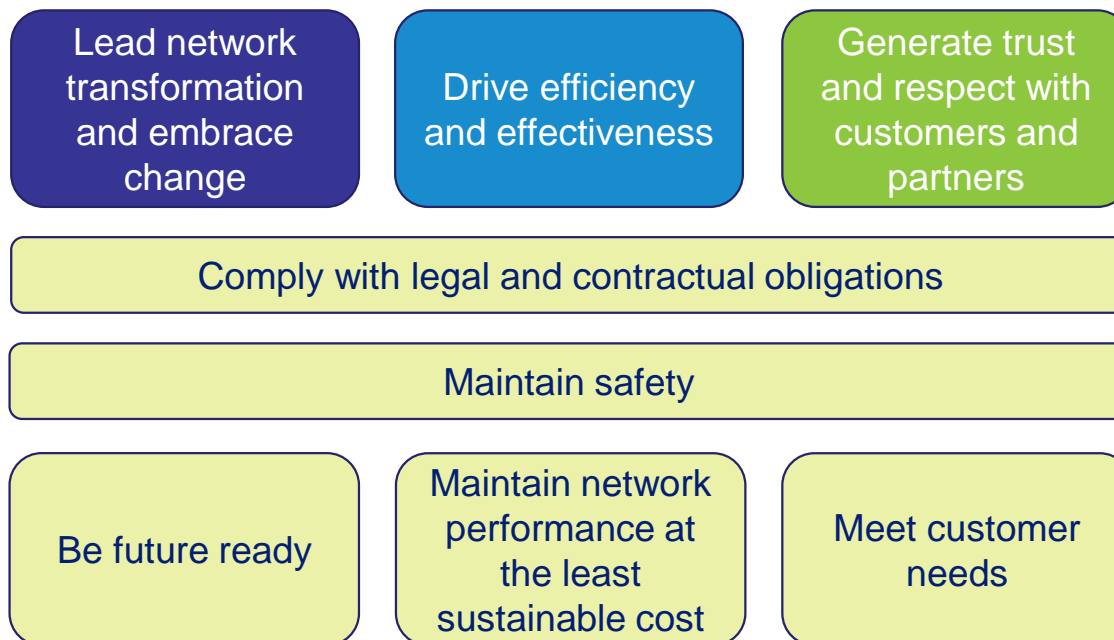
- > Hazards and risks to the safety of any person and their property will be minimised "as far as practicable".
- > Consumers will be provided with information, tools and service options to facilitate their energy choices.
- > Effective consultation will take place with stakeholders to comprehend and integrate their requirements in asset management decisions.
- > The specification and application of assets will comply with legislation, regulation, Australian Standards and industry codes.
- > The national energy laws, rules and their fundamental price, performance and security principles will guide service development in the interests of customers.
- > Innovation and technology will be embraced to economically reduce service risks, increase service value and manage service performance commensurate with customer's emerging needs.
- > Skilled people will be developed and deployed to sustainably manage risks, increase the value of services and improve the range of services.
- > Energy network development will balance the environmental, economic, and social needs of today without sacrificing the interests of future generations.
- > Practices, systems and facilities will be continuously improved commensurate with certification to a recognised asset management standard.


Nino Ficca
Managing Director
July 2017

Asset management objectives

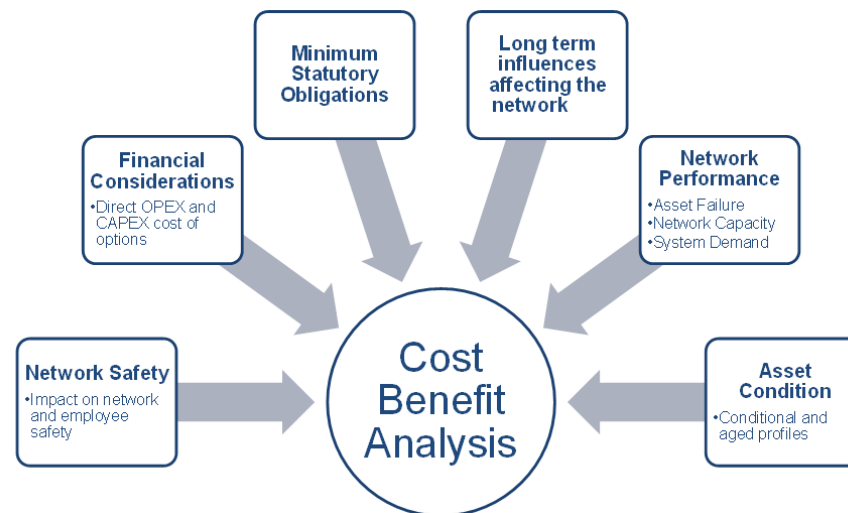
- ▶ **Key to asset management is translating the organisation's objectives into asset-related decisions, plans and activities**
- ▶ **This is done by creating asset management objectives which align to and support the overall objectives of an organisation**
 - › In this way, if asset management activities are aligned to the asset management objectives, they should support the objectives of the organisation
 - › It provides a clear line of sight as to how all activities, from inspecting a pole to replacing a zone substation to upgrading the asset information system, support the objectives of the organisation

Alignment with corporate objectives



Planning to achieve asset management objectives

- ▶ Asset management is a continuous cycle of performance monitoring and improvement
- ▶ A risk based approach is used to translate the asset management objectives into asset-related decisions, plans and activities



4. Asset management decisions



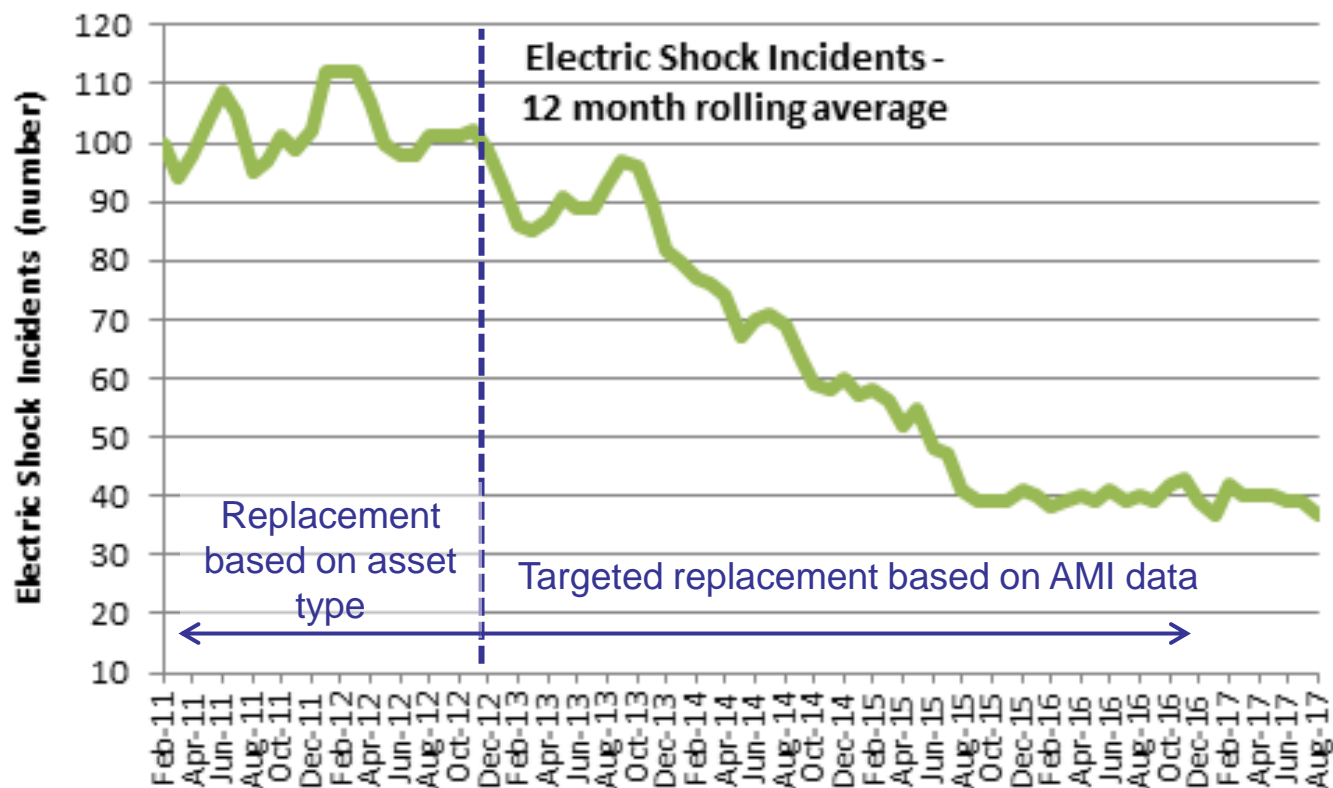
Service cables and electric shocks

- ▶ **Service cables connect customers to the distribution network**
- ▶ **Service cable failures are the primary cause of electric shock incidents**
- ▶ **Historically, replacement programs were created when failure trends emerged for a particular type of cable**



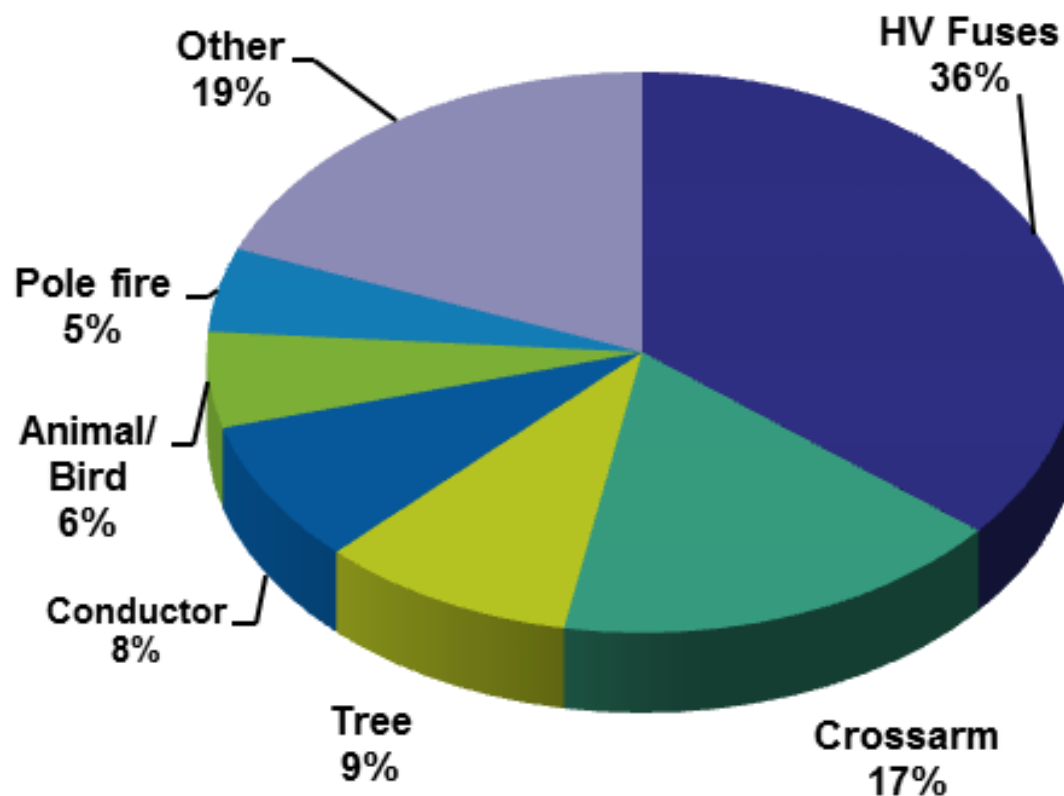
- ▶ **AMI meter data has allowed AusNet Services to detect service cable issues as they are emerging**
- ▶ **This has allowed a change of strategy to a targeted replacement of service cables that are known to be defective**

Electric shock incidents



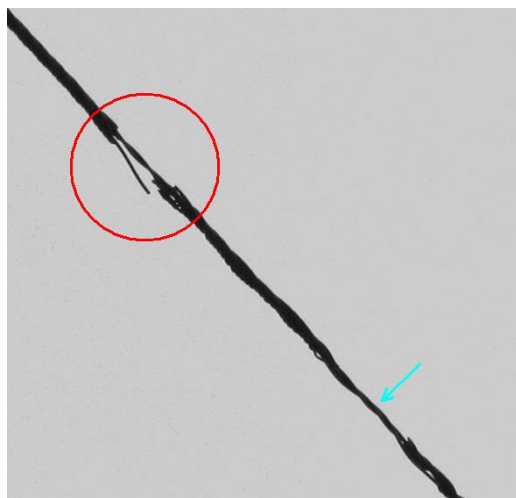
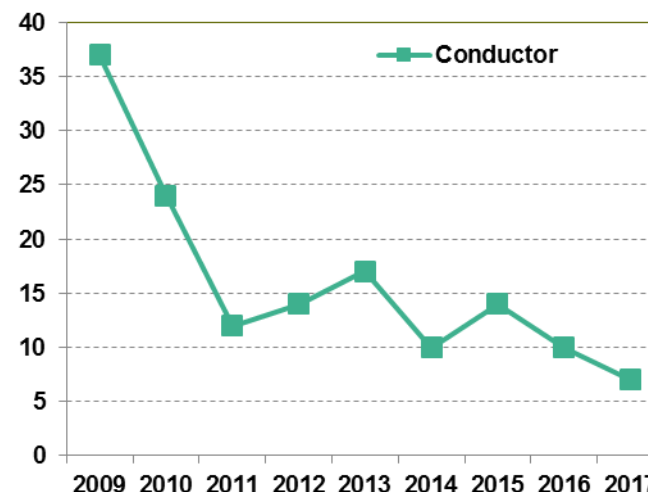
Fire start causes (2006-2010)

- ▶ Fuse failures
- ▶ Pole and cross arm failures
- ▶ Conductor failures

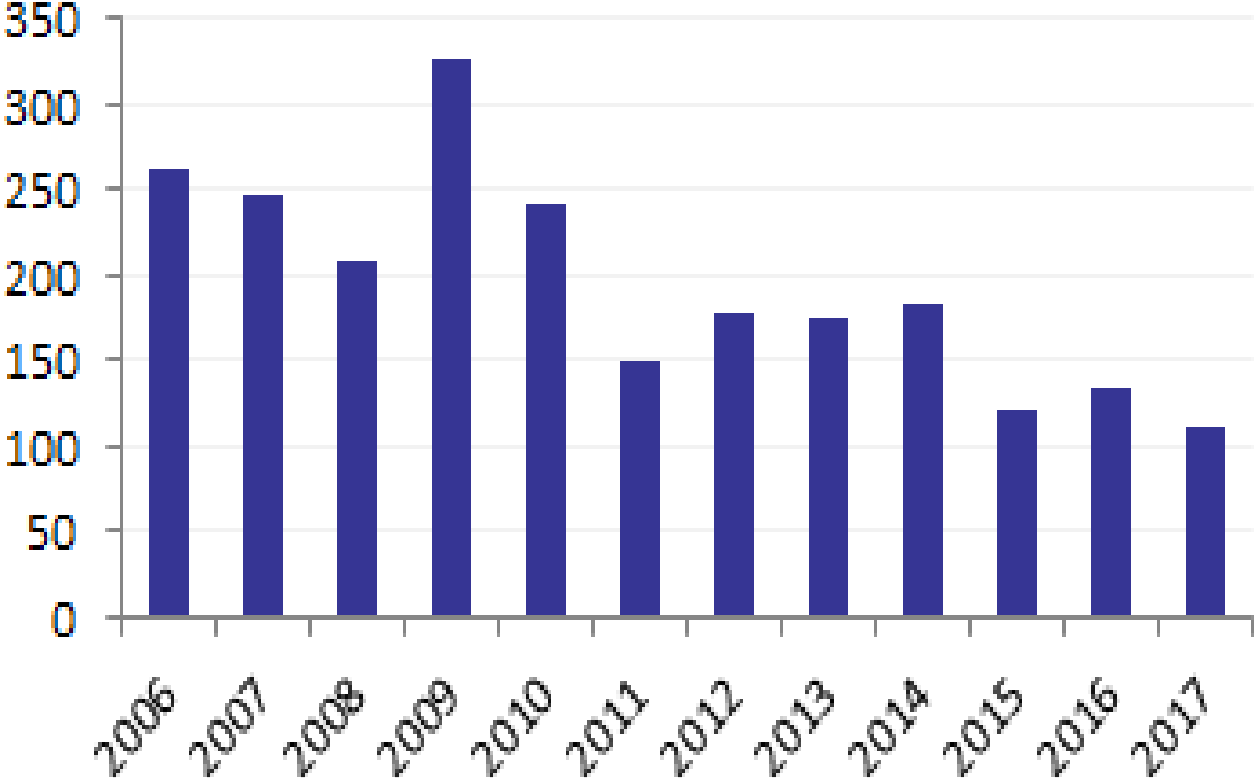


Fire start response: Conductors

- ▶ Fuse failures
- ▶ Pole and cross arm failures
- ▶ Conductor failures
- ▶ enhanced conductor replacement program
- ▶ non-metallic screen HV ABC replacement
- ▶ LV spreaders and HV spacer rectification
- ▶ Powerline Replacement Fund

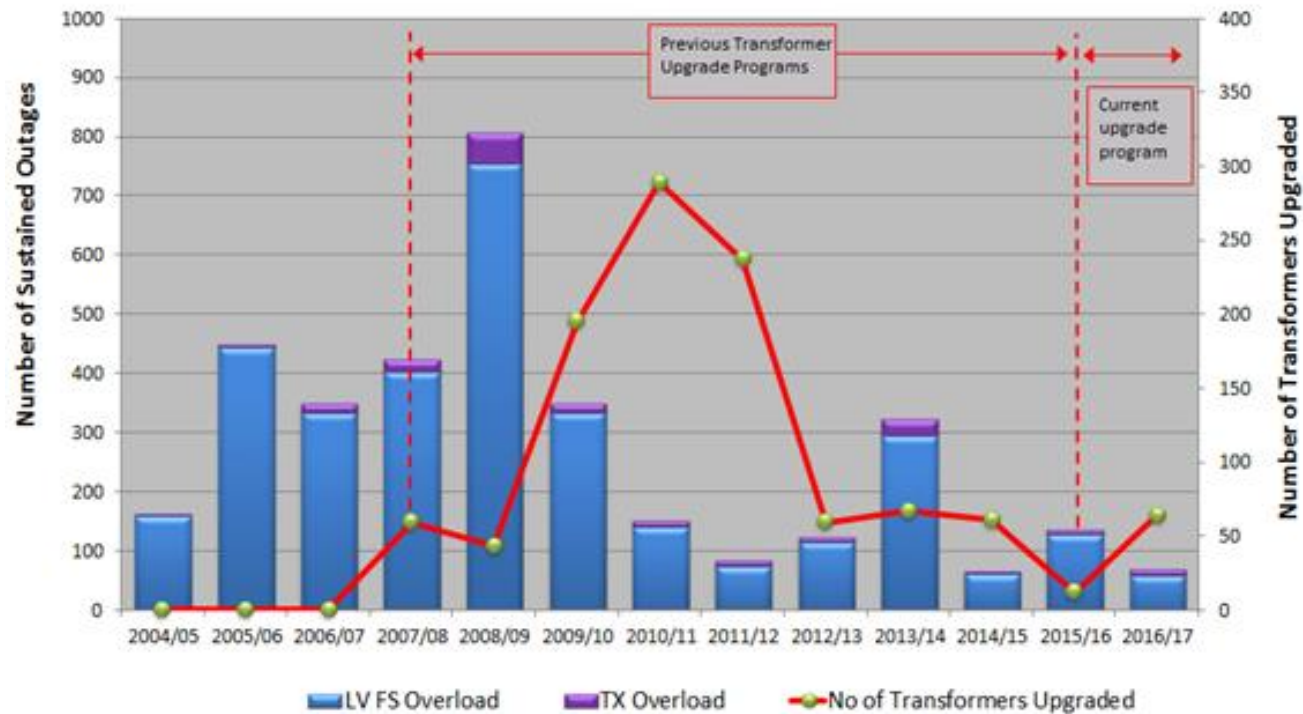


Fire start incidents



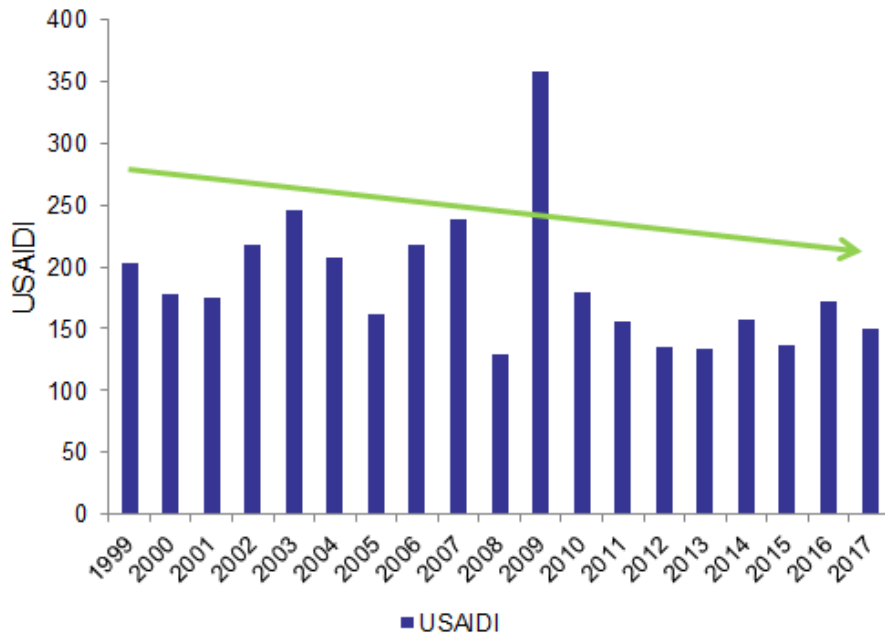
Transformer and circuit overloads

Number of Outages During Summer due to Transformer & Low Voltage Circuit Overload

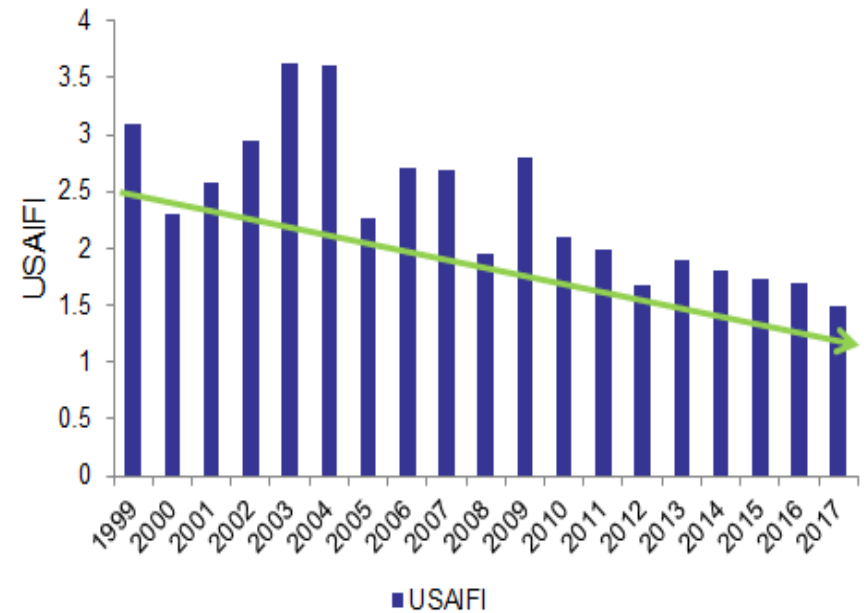


Reliability

Duration of outages



Frequency of outages



5. EDPR implications



EDPR implications

- ▶ **Outputs of the asset management system form the foundation of the EDPR**
- ▶ **The major review cycle of network and plant strategies is linked to the price review cycle**
- ▶ **These documents inform expenditure forecasts and form the foundations for technical justifications for the EDPR**

Having a certified asset management system demonstrates to customers, shareholders and regulatory bodies that we are following asset management best practices to provide the best price and service outcomes for our customers

Questions

