

Technology Deep Dive

Presentation

30 May 2019



missionzero

What is technology expenditure?

▶ **Technology expenditure includes:**

- › operating costs to keep our existing technology assets working
- › capital expenditure (capex) to replace our technology assets (including software) as their conditions deteriorate and risks rise

▶ **It is driven by a number of factors including:**

- › customer preferences
- › risk
- › asset performance
- › industry and technology change

▶ **The demands on technology services is growing fast, not least due to an increasingly complex environment, with changing customer needs, and an increasing number of users, devices, territories and cyber threats which must be addressed if we are to keep delivering our current level of distribution service**

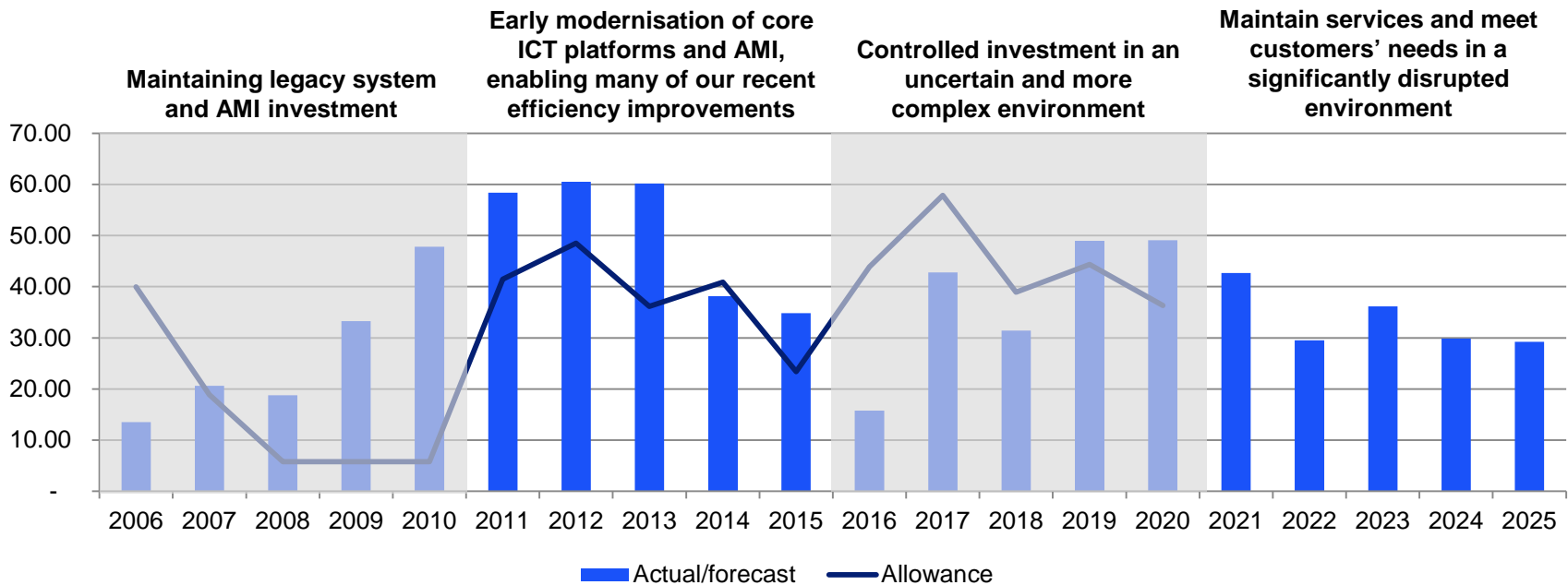
▶ **We also need new technology expenditure to meet new regulatory demands:**

- › 5 minute settlement
- › Cyber Security

Our proposed technology capex



- ▶ **Our proposed technology capex is \$167m (real \$2020) for the 2021-25 period. This represents around 11% of total capex. This expenditure is also around 11% lower than the technology capex we expect to incur in the current regulatory period.**
- › Our proposed technology operating expenditure (opex) has previously been discussed with the Customer Forum




Our approach and our proposals have already been subject to several different reviews



▶ Our approach was developed with Deloitte Consulting

Deloitte was (among other things) satisfied that:

- The drivers of expenditure reflect reasonable business requirements and are directly related to the provision of distribution services
- Each Technology expenditure program is required to enable the delivery of distribution services and that this was assessed through conducting workshops with AusNet Services' team members and assessing each component of the technology forecast against AusNet Services' current technology landscape and the current and anticipated regulatory requirements, vendor changes and customer needs
- The cost forecasts were developed with reference to benchmark drivers and elements of expenditure. In particular, Deloitte assisted AusNet Services to develop the assumptions underpinning the forecast costs for each program

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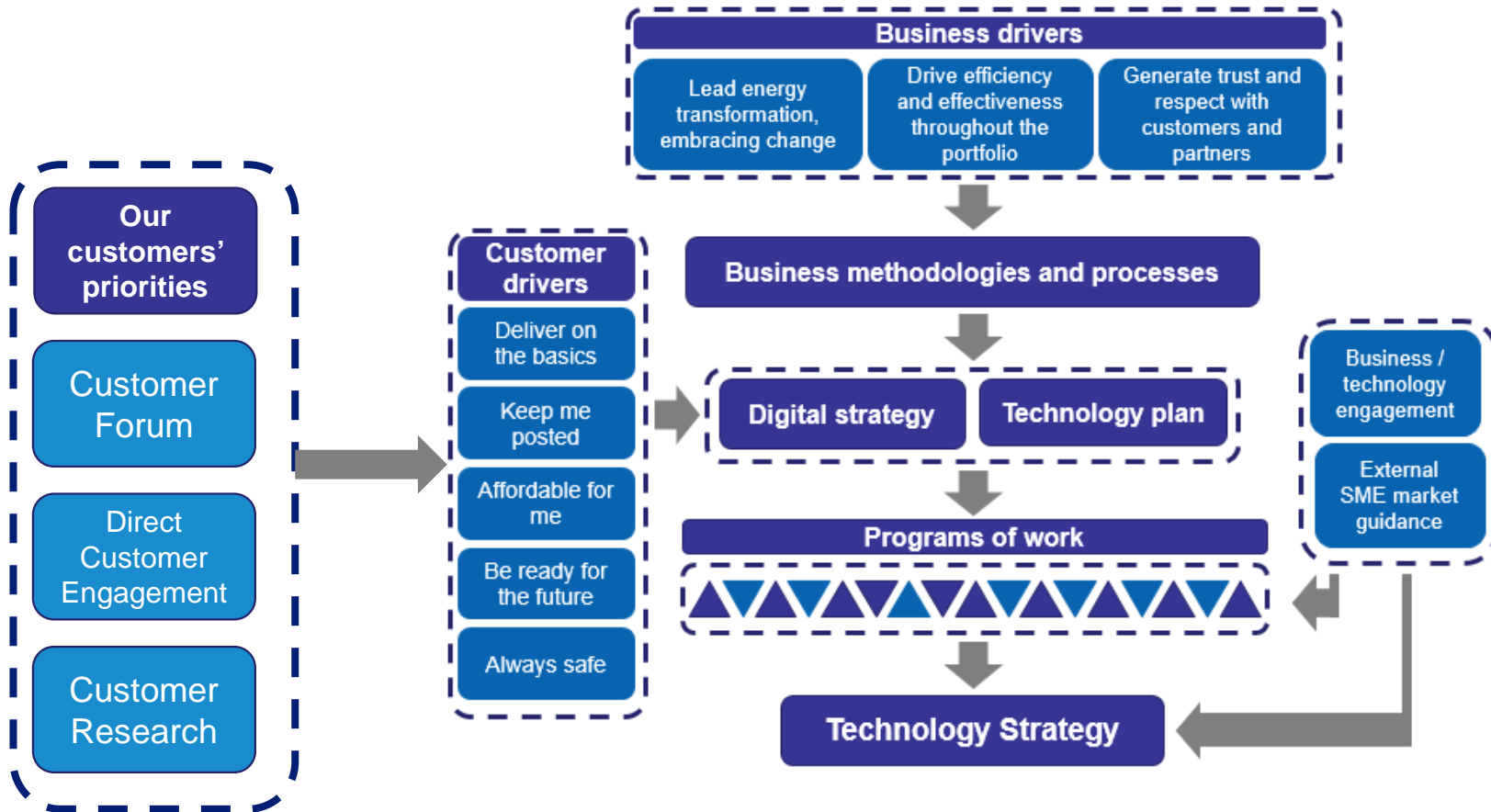
Review	Capex/\$m
May 2018	225
June 2018	216
Draft proposal	168
Our current proposal	167

- ▶ Several internal reviews, covering our strategy, options and costs, were also undertaken
- ▶ Another consultant was engaged to undertake a further review of our proposal
- ▶ **Our proposal has therefore been subject to a high level of scrutiny**

Our technology strategy

- ▶ **Our technology strategy sets the direction and defines an actionable technology program of work for the 2021–25 period. It outlines the key drivers underpinning our proposals while recognising that our proposed program of work has been developed during a time of unprecedented change. It also ensures that we comply with our regulatory obligations, taking into account our key drivers which include:**
 - › *Customer expectations:* to ‘**deliver on the basics**’, ‘**keep me posted**’, ‘**make it affordable**’, ‘**be ready for the future**’, and ‘**always safe**’, which have been obtained from customer consultation (see next 2 slides);
 - › *Industry and Technology:* technology is playing an increasing role in electricity networks and we rely on digital technologies to control expenditure and improve overall performance and reliability where our customers demand it.;
 - › *Cyber threats:* responding to increasing cyber threats to maintain a safe and secure network and working environment, and protect customers’ privacy.

The importance of our customer engagement in shaping our strategy is illustrated below



As identified by our engagement and research, customers want:



More rapid and accurate resolution of customer requests and issues

- The Customer Information Management (CIM) program builds on the lifecycle replacement of our current suite of customer management systems (which are currently implemented for particular types of customer contact)
- We intend to integrate tactical disparate data source into a Company-wide CIM capability **providing a seamless customer platform** holding all customer communication and their history of our interactions in a consistent way. This will allow proactive and reactive customer communications
- Where we have used this capability for individual customer requests and issues, it has proven to be an effective way of delivering quick and accurate resolution which will be available across the entire company

Provision of more accurate and timely communication with affected customers about restoration times

- The Outage Management program aims to improve our forecasting, coordination and management of supply restoration
- We are taking advantage of lifecycle replacement to our existing Outage Management to deploy these new capabilities and so improve our service to customers when they experience outages

Customer Information Management System (CIM)



- ▶ **This (\$6.5 million, \$2020, real) proposal will enable us to better track and understand evolving interactions with our customers.**

- ▶ **It will:**
 - › address a number of the limitations associated with our current approach (see next slide)
 - › enable us to provide appropriate advice to assist customers in maximising their generation (if they are connected with DER) and provide the more personalised and tailored customer service our customers have told us they would value, including enhanced outage information
 - › allow us to better understand our customer base
 - › allow for better targeted and meaningful communication, including enabling more accurate notifications during outages

Outage management



- ▶ **This (\$9.3 million, \$2020, real) proposal aims to minimise the impact of planned outages on customers, by using advanced analytics and automation across the workflow to improve processes for planned works.**

- ▶ **Our proposal looks to deliver an efficient planned outage management process and to improve the capability of the workflow including:**
 - › Data mapping to correctly attribute customers' locations to substations;
 - › Maintaining the data quality input by field workers;
 - › Utilising data for analytics (predictive maintenance);
 - › Automation of works planning based on assets identified for maintenance;
 - › Automation to draft switching instructions based on approved switching plan;
 - › Automation to identify customers within identified outage area; and
 - › Automation to notify customer (via physical letter, email or text message).

- ▶ **Our proposal helps '*deliver the basics*' as it will result in improved processes around network related works which will, in turn, enhance the resilience of the network and ensure consistent power supply. It will also '*keep me posted*' by delivering timely and accurate information on works and completion status.**