IT deliverability plan 2021-2026

PAL ATT007 - IT deliverability plan - Jan2020 - Public

Contents

1 Delivery approach

Key to our ability to deliver our proposed IT portfolio is our IT Project Delivery Framework and the IT Operating Model within which it operates. This section provides a brief overview of our delivery framework and operating model and highlights how our flexible resourcing model ensures delivery of projects on time and within budget.
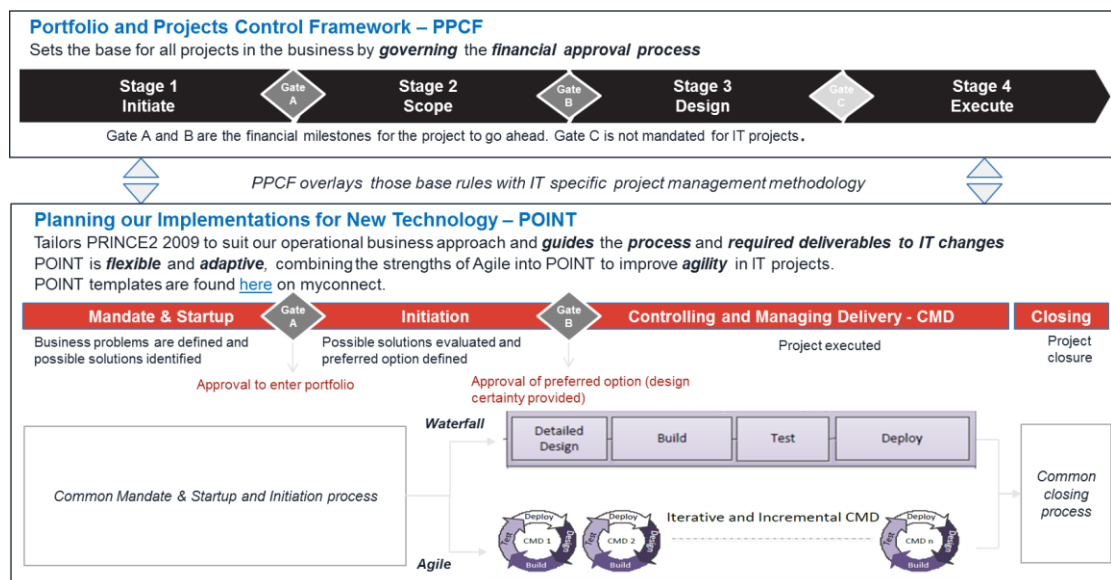
1.1 Project delivery framework

We deliver all IT projects across CitiPower, Powercor and United Energy using our IT project delivery framework which includes our

- Portfolio and Projects Control Framework (**PPCF**)

- Planning our Implementations for New Technology (**POINT**) methodology.

The figure below shows the relationship between the PPCF and POINT.

Figure 1 – IT project delivery framework

The PPCF is the overarching governance and approvals framework within which we manage IT portfolio and projects. Key stages include:

- **Stage 1 Initiate** - project controls set up, detailed schedule and milestone tracking established, and cost estimates developed, stakeholders identified and consulted

- **Stage 2 Scoping** - project sponsor agreed scope, outcomes, success criteria, benefits and quality requirements. Risks and dependencies identified, minimum viable product costed, resource plan completed, funding source agreed and funding approved by IT investment committee

- **Stage 3 Design** - translation required business process changes into system design changes which inform the build and test stages. Produce authorised documentation of the design solution

- **Stage 4 Execute** - All IT projects are executed using the POINT delivery methodology, described below.

POINT is a tailored methodology to suit the IT business, reflects our operational business approach and provides a process for all business areas, IT system and infrastructure changes and implementations. This approach assists IT and other business units to achieve a common, consistent and repeatable process with shared accountabilities, stakeholder buy-in and coordinated resources.
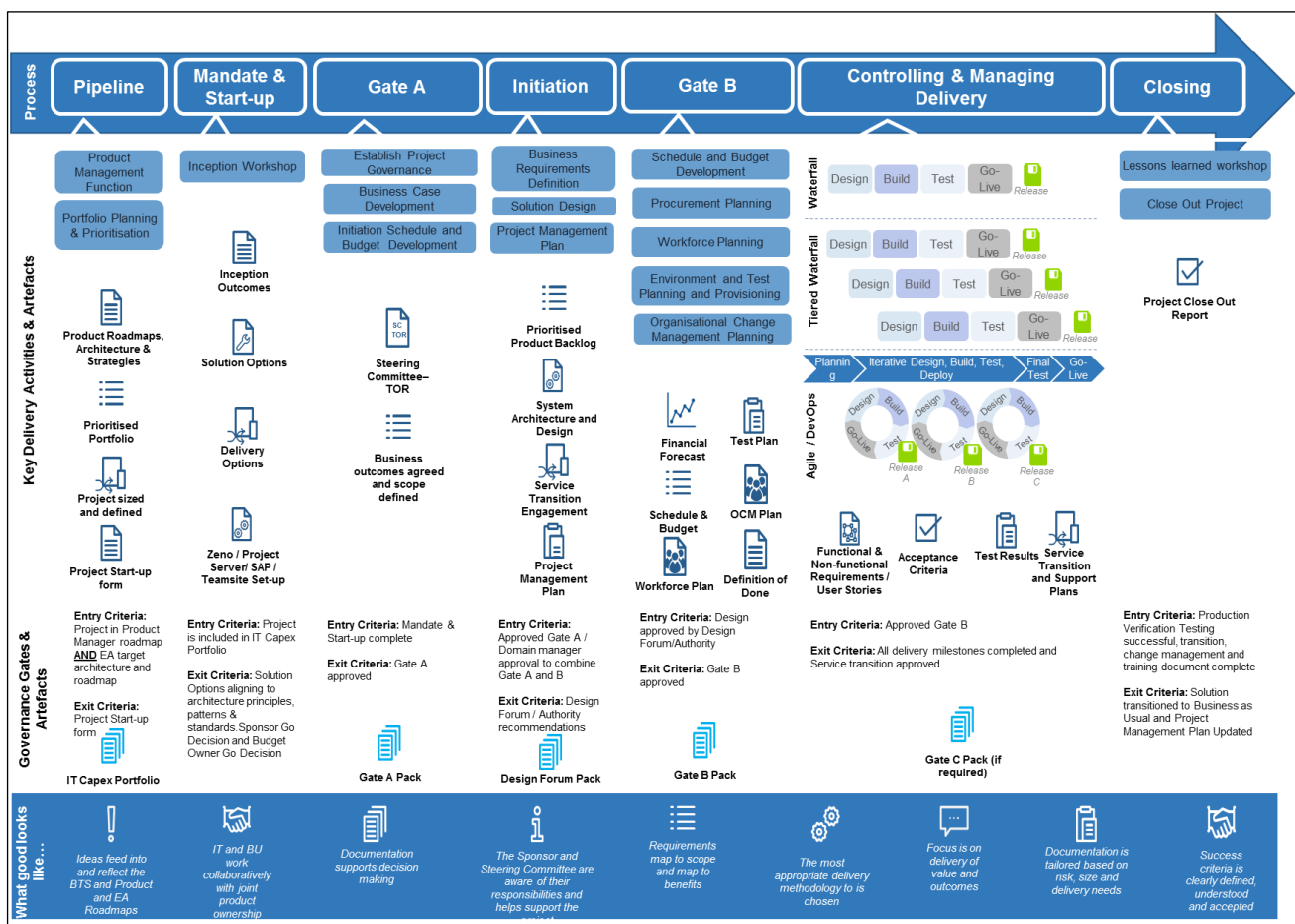
Within the POINT methodology, there is a sequence of five project management stages, including pipeline, mandate and start-up, initiation, controlling and managing delivery and closing. Throughout these stages there are assessments of project scope against business need, budget estimates, approvals and tracking, resource scheduling, milestone setting and tracking, document management, testing, production and deployment and close out reporting.

To ensure project success, POINT mandates the processes and methods used throughout the life of the Project, including:

- Project governance

- Status reporting

- Project financials, including estimation and forecasting

- Managing risks, actions, issues (including escalation), dependencies and project change

- Document management.

The figure below demonstrates the POINT methodology.

Figure 2 – IT POINT Methodology

Our project delivery framework ensures a consistent, carefully managed and well governed approach to project delivery.

1.2   IT operating model

The energy industry is undergoing a period of rapid change with technology at its core. To keep up with the pace, our technology teams need to be adaptable, innovative, secure and cost effective. To achieve this, our operating model is largely based on an outsourced labour support model, as follows:

- we insource labour for managing overall project delivery, our real time systems and some technical specialists with unique skills. This includes the IT Project Management Office which provides a central point of contact and point of truth for project management, tools, templates and processes. Insourced labour represents approximately 10% of total labour resources for IT project delivery. Insourced labour represents approximately 10% of total labour resources for IT project delivery

- we outsource the remaining approximate 90% of labour services for supporting our core systems and providing specialised labour for project delivery.

Our outsourced delivery model enables us to ensure efficient costs and access to technical specialists, including to:

- efficiently scale up the required project resource effort in a timely manner, and then scale down as needed

- source technical expertise with most relevant technical knowledge for each specific project.

We attain our outsource labour through our IT resource partners and IT supplier panel.

Our resource partners provide core support services as well as supplementary labour to support project delivery. Resource partners are selected through competitive tender processes which are renewed periodically through further market testing processes.

Our key resource partners include:

- Wipro - provides everyday support for our corporate and market systems, including application maintenance and support

- CGI - support our IT infrastructure services virtual environments, hosting, storage, Citrix, batch processing, data management and some security operations

- Dimension data - supports network systems and telephony

- application vendors - who provide labour support for implementing system upgrades.

We also obtain labour resources for project delivery through our IT supplier panels. Our IT supplier panels are selected through competitive tender process, periodically reviewed through further market testing. As part of the procurement process we set bands on labour rates for each labour skill set which ensures standardisation of daily rates for IT services.

Our IT operating model provides us with resourcing flexibility which enables us to schedule project timing based on business need rather than resource availability. The combination of internal project governance and project delivery management with access to multiple sources of labour resource also ensures we can deliver projects on time and budget.

We periodically update our key resource partners with information regarding our project pipeline to enable them to forward plan to meet our needs.

1.3 Evidence of project delivery in 2016-2020

1.3.1 United Energy Real Time Systems Infrastructure Remediation

United Energy uses the Oracle Utilities Network Management System (**OUNMS**) to monitor and control the electricity distribution network. The OUNMS product provides us with a Distribution Management System (**DMS**) and Outage Management System (**OMS**). Silver Spring Network's UtilityIQ (**UIQ**) assists with monitoring the networks. These systems form part of our mission critical Real Time Systems (**RTS**). A review of the RTS infrastructure in October 2017 identified significant deficiencies the current environment affecting system performance, security and availability.

Infrastructure Remediation activities were urgently required to remediate this mission critical system environment to align to expected service levels. This project established the foundation infrastructure, necessary to deliver the DMS upgrade and UIQ projects, while aligning with infrastructure design principles and our proven CitiPower / Powercor environments.

The scope of the RTS Infrastructure Remediation project was to:

- establish infrastructure necessary to support DMS / UIQ database requirements (Production, Disaster Recovery and Non-Production)
- establish a United Energy enterprise class shared storage solution infrastructure for RTS in-lieu of the existing shared supercluster / storage infrastructure
- support DMS application requirements (Production, Disaster Recovery and Non-Production)
- support UIQ database requirements (Production, Disaster Recovery and Non-Production)
- migrate UIQ from the corporate network, segregating operational metering transactions from the corporate environment.

The project successfully delivered RTS infrastructure remediation in March 2018. Key achievements included:

- the establishment of new infrastructure platform to support DMS and UIQ solutions, that support existing service levels, while aligning with the IT strategic direction
- the establishment of an agreed support model to support the RTS environments for OUNMS and UIQ.
- provided the foundation for subsequent UE Silver Spring Networks UIQ upgrade and UE DMS Upgrade projects that utilised this new RTS infrastructure which occurred in November 2018
- project delivered 14% below budget, at a cost of $2.4m. Note this project was not proposed or funded for the 2016-2020 regulatory period.

The RTS remediation project demonstrates our ability to effectively deliver urgent projects through our POINT methodology and IT operating model. The key aspects which ensured success include:

- tight scope management, with focus on key benefits and requirements
- close management of key tasks during sensitive periods
- forward planning to ensure resources were available when, with effective use of flexible external resources.
- embedding vendor engagement in the process
- close collaboration with the United Energy RTS team.

1.3.2 CitiPower/Powercor metering contestability project

In November 2015, the Australian Energy Market Commission (**AEMC**) made a final Rule to introduce metering contestability. The new Rules introduced new roles and responsibilities in relation to the provision of metering services and data and resulted in extensive changes to Australian Energy Market Operator's (**AEMO**) market procedures and B2B transactions. The Rule change also introduced additional consumer protections relating to data access and consents.

We successfully delivered a project to ensure compliance with the new Rules and AEMO market procedures by the December 2017 compliance date. The project was delivered on budget for a cost of $15.3m ($real 2015). We received funding of $16.3m ($real 2015) for the 2016-2020 regulatory period.

The program successfully delivered a major release of system and business process changes to meet the compliance requirements in December 2017.

Key to successful project delivery on time and within budget included:

- forward planning ensured resources were available when required. Efficient access to resources in a timely manner was enabled through utilisation of our IT resource partners and IT supplier panel

- embedding of vendor partners in the delivery process dramatically improved the visibility, stability and quality of vendor delivery

- use of dedicated environment and release management within market compliance project delivery

- test automation improved the ability to complete high volume repetitive testing more efficiently.
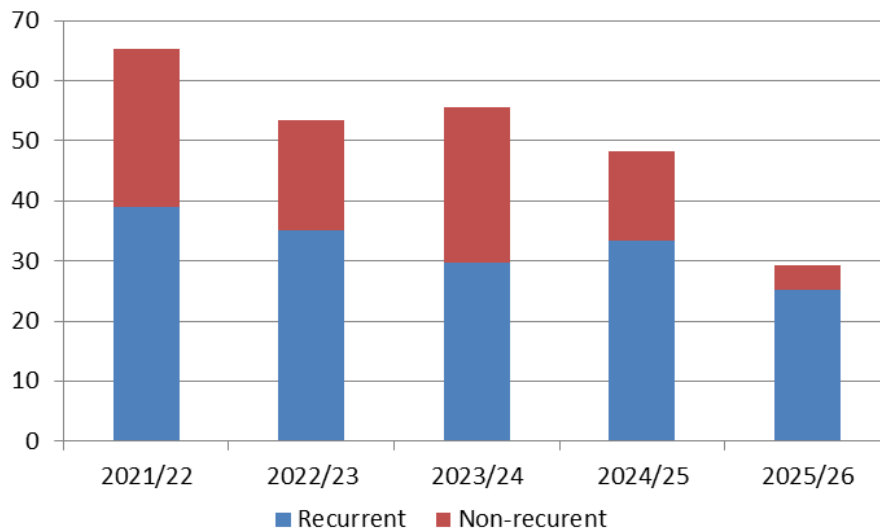
Delivery of the metering contestability project on time, within budget and to the specification required for compliance, demonstrates our ability to implement large scale projects efficiently within confined timeframes.

2 Our 2021-2026 IT portfolio

2.1   Profile of our IT capital expenditure portfolio

The figure below demonstrates the expenditure profile of our IT capital expenditure portfolio for the 2021-2026 regulatory period.

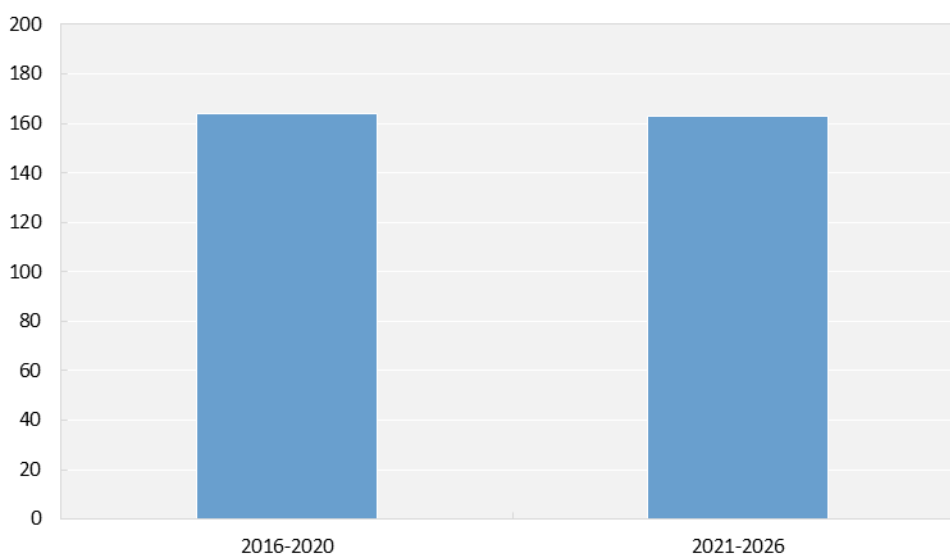**Figure 3 – CitiPower and Powercor IT capital expenditure portfolio, 2021-2026, $m 2021 direct cost**

Source   CitiPower and Powercor

The profile of our IT capital expenditure portfolio is driven by the timing of our major non-recurrent projects, discussed below.

Our recurrent spend is aligned with history, as shown in the figure below.

Figure 4 – CitiPower and Powercor recurrent IT capital expenditure, $m 2021 direct cost

Source: CitiPower and Powercor
Note: 2016-2020 years ending December. 2021-2026 years ending June.

We have scheduled our non-recurrent projects to:

- first - ensure alignment with externally driven timeframes, including compliance dates (5 minute settlement) and vendor support roadmaps (s/4 Hana upgrade)

- second - sequence our other non-recurrent programs around the time-bound projects to efficiently manage interdependencies.

The main independencies within our IT capital expenditure portfolio relate to the SAP s/4 Hana upgrade. Our SAP ERP system is a central system in our IT environment. Many other systems are integrated with SAP. We have therefore sought to implement projects involving changes to systems which are integrated to SAP to occur before the cut over from SAP ERP to s/4 Hana. Following the s/4 Hana upgrade, we will need to reintegrate existing systems to s4Hana, particularly for our Enterprise Management Systems, we therefore do not propose commencing major non-recurrent works following the s4 Hana upgrade.

The table below demonstrates the timing for our major non-recurrent projects.

Table 1 – VPN Major non-recurrent projects, $m 2021 direct cost

Non-recurrent project	Timing*	Reason	Value
5 minute settlement	2021/22	Compliance required by December 2022	17.8
SAP s/4 Hana upgrade	2023/24	SAP support ends 2025	22.6
Digital network	2021/22-2023/24	Staggered across period to account for within project dependencies	22.3
Customer enablement	2021/22 - 2024/25	Staggered across period to account for within project dependencies	6.3
Intelligent engineering	2023/24	Optimal year to implement as not impacted by SAP upgrade	8.8

Source   CitiPower and Powercor
Note   * Timing refers to when the majority of project costs are incurred

2.2   Delivery of our IT capital expenditure portfolio

We will deliver our portfolio of recurrent and non-recurrent IT capital expenditure projects using our project delivery framework and IT operating model discussed in section 2.

We will manage the increased resourcing requirements to deliver our major projects through forward planning of resources and ensuring effective management of project budgets and scopes. Our outsourced resourcing model enables us to seamlessly scale up and down our resources.

We plan to resource our 5 minute settlement project using a replica of the model used for the successful delivery of our Meter Contestability project in 2017. We plan to utilise the same resource partners and IT suppliers to ensure we leverage the most relevant and experienced technical and project delivery skills. We also plan to embed vendor engagement throughout the project to ensure effective implementation.

We plan to resource the SAP s/4 Hana upgrade by:

- engaging an experienced SAP S/4 implementation partner to ensure right fit and repeatable approach is taken to the delivery

- utilising our internal SAP capability to manage project delivery and overlay business knowledge and needs

- engaging additional technical specialist skills through our resource partners and IT suppliers.

Given the nature of our customer enablement, digital network and intelligent engineering projects, these will be delivered through our usual IT project delivery framework and operating model combined with core support from non-IT expertise, including internal subject matter experts and external expert advisors.

We have established a new cyber security group within our IT business unit with responsibility for planning and designing our cyber security investment program and we have a cyber operations team that run tactical security operations. We also have dedicated internal resource responsible for managing the delivery of cyber security projects.

Other recurrent programs including infrastructure refresh and currency of our network management, market systems and enterprise management systems will continue to be delivered as they are today through a combination of internal project delivery managers and outsourced technical support.

Our forecast capital expenditure is estimated using a bottom up approach that leveraged information on historical projects relating to the target applications, and information on projects of similar nature and scope. We applied an external blended labour rate independently sourced from PwC.