



Explanation of Capital Expenditure
Requirements
Attachment 2: HVDC Cable Systems –
Submarine and land cables

Revenue Proposal

November 2024



Responsibilities

This document is the responsibility of the Marinius Link Team, Marinius Link Pty Ltd PO Box 606 Moonah Tasmania 7009, ABN 47 630 194 562 (hereafter referred to as MLPL).

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Executive summary

Purpose

Marinus Link Pty Ltd (**MLPL**) has prepared this document to support its Revenue Proposal – Part B (Construction costs). This document relates to the manufacture, supply and installation of the submarine and land cables, which is the subject of a package of work (the ‘cable system’ scope of work) that was awarded to Prysmian Powerlink in August 2024. The purpose of this document is:

- To describe the activities relating to the cable system scope of work, which are planned to ensure that Marinus Link is delivered on time and on budget.
- To explain MLPL’s approach to procuring these services through a competitive tender process to ensure that the best outcome is achieved on behalf of customers in relation to price, timing and service performance.

A separate draft document, Attachment 1, provides the equivalent information for converter station equipment package of work, which was awarded to Hitachi Energy in May 2024. The remaining package of work relates to Balance of Works, noting that the tender process is expected to be completed in May 2025, and is discussed in Attachment 3. Other components of our forecast expenditure are explained in other attachments to this Revenue Proposal.

Scope and timeline

Marinus Link will be delivered in two 750 MW stages, each providing 750 MW of capacity. AEMO’s 2024 ISP has assessed the least cost solution as requiring the first stage to be delivered in 2030-31 and the second stage as early as 2032-33, under the green exports scenario.¹ MLPL is therefore progressing the first stage by 2030, with the timing of the second stage to be informed by AEMO’s 2026 and 2028 ISPs. This document relates to the first stage of the project, which will deliver the first cable and undertake sufficient work to facilitate the timely and efficient delivery of the second cable.

The cable system scope of work consists of submarine cables across the Bass Strait and land cables in Victoria. At a high level, the cable system scope of work includes:

¹ AEMO 2024 Integrated System Plan, Appendix 6, Cost Benefit Analysis, June 2024, page 63.

- Design, supply and installation of the HVDC submarine and land cables, including earthing system and fibre optical telecommunication cables required for the cable monitoring systems and communication between the converter stations; and
- Landfall horizontal directional drilling (**HDD**) works, which comprises:
 - the stage 1 and stage 2 duct systems (including the pipes, grout, end caps, string lines and associated components and works) from onshore to a 10 metre water depth for the Victorian and Tasmanian landfall, and
 - the stage 1 and stage 2 duct system (including the pipes, thermally stabilised backfill, bell mouths, end caps, string lines and associated components and works) from the Landfall HDD exit to the Transition Joint in Victoria including the joint bay.

This scope of work is reflected in the contract terms with Prysmian Powerlink, which were settled on 1 August 2024.

Forecast expenditure

Table 1 shows the forecast information for cable system scope of work that is provided to the AER on a confidential basis, which reflect the terms and conditions of the contract awarded to Prysmian Powerlink following a competitive tender process and intensive negotiation to resolve outstanding contractual terms and conditions.

Table 1: Forecast expenditure for cable system scope of works (\$m real 2023)²

	Pre-period ³	2025-26	2026-27	2027-28	2028-29	2029-30	Total
Cables design, supply and installation	33.7	74.2	24.9	118.2	365.6	138.9	755.6
Landfall HDD Costs	19.0	22.2	81.5	8.6	0.0	0.0	131.4
Additional costs (Adjustments)	-0.4	3.4	0.0	5.9	0.0	-0.9	8.0
Total expenditure	52.4	99.8	106.4	132.7	365.6	138.1	895.0

The contract provides for 83 milestone payments for cables design, supply and installation, and 27 milestone payments for the Landfall HDD scope of work. MLPL is also required to pay compensation amounts for delay

² The forecast expenditure excludes testing and commission expenditure, which is expected to be incurred after 30 June 2030.

³ This includes MLPL's pre-construction costs which were incurred prior to 1 July 2025.

costs (including in relation to interface risks); actions to accelerate or re-sequence work; and variations, as defined by the contract. The contract provides a detailed set of rates that apply in these circumstances for both the cables design, supply and installation, and Landfall HDD scopes of work. In addition to these rates, the contract provides for adjustments to account for market changes in the cost of metals and fuel, in accordance with indices specified in Schedule 2 of the contract.

The forecast expenditure presented in Table 1 reflects the expected timing of the milestone payments and the baseline contract price, including forecast changes in the price indices. A separate risk allowance provides an estimate of the amount that MLPL expects to pay in accordance with the contract terms as a result of delay, acceleration or re-sequencing, disruption and variations.

Market review and implications

To inform our procurement strategy, MLPL conducted a review of the international supply and demand conditions for submarine and land cables. Specifically, we examined existing HVDC cable projects over the period from 2021 to 2025. This review indicated that the submarine cable market is highly constrained, with a significant concentration of projects expected toward the end of this period. Looking forward, the global transition towards more renewable energy as well as the war in Ukraine and increasing instability in the Middle East are likely to further bolster demand for interconnector capacity as countries reassess their energy supply security needs.

In addition to conducting an international market review, we undertook market soundings to ensure that our procurement strategy secured effective competition between prospective service providers, with the objective of achieving the best price-service outcome for consumers. Subsequently, MLPL's market analysis and soundings informed our decision to enter into a Capacity Reservation Agreement (**CRA**) with one of the prospective service providers.

MLPL concluded that securing this capacity was necessary in order to achieve the planned completion of site acceptance tests for the cable works by 30 June 2030. As part of the Rewiring the Nation program, the Commonwealth has agreed to underwrite the payment of the capacity reservation amount payable by MLPL. From a consumer perspective, the capacity reservation agreement will deliver significant benefits by ensuring that the project is capable of being delivered in accordance with the optimal timing identified by AEMO.

Consumer engagement

MLPL's Consumer Advisory Panel (**CAP**) has consistently raised three matters during the engagement process that are relevant to MLPL's procurement strategy:

- **Local suppliers.** The CAP has encouraged MLPL to consider how international suppliers can work with Australian partners to employ and support local suppliers.

- **Risk trade-offs.** The CAP has encouraged MLPL to consider risk trade-offs in making procurement decisions. At MLPL's suggestion, the CAP appointed an independent procurement advisor to assist it understand how risk trade-offs were being managed by MLPL and to provide feedback on MLPL's procurement approach.
- **Total project costs.** CAP members have consistently urged MLPL to keep consumers front of mind when making decisions, highlighting that many consumers are on fixed incomes that are not keeping up with inflation.

MLPL welcomes this feedback from the CAP. In relation to local suppliers, MLPL notes that there are a small number of international suppliers with the necessary skills and experience to provide the cable system scope of work. Nevertheless, MLPL intends to encourage the successful tenderer to engage with Australian entities to provide opportunities through subcontracting arrangements, where possible. MLPL also accepts the CAP's feedback in relation to the project costs, noting that MLPL's procurement approach is focused on delivering the best outcomes for consumers.

In addition to obtaining general feedback from the CAP, MLPL considered it important that a consumer-perspective was explicitly reflected in our procurement decisions as far as practicable, noting the commercially sensitive and technical nature of these negotiations. At MLPL's suggestion, therefore, the CAP selected an independent procurement advisor to attend procurement meetings and review relevant documentation on behalf of consumers.

The independent procurement advisor provided feedback on various risks arising from the cable systems scope of work, including the potential for project delays, offshore trenching risks and offshore weather. In addition to raising detailed technical issues, the independent procurement advisor commented on the cost impact of making payment milestones. A copy of the independent procurement advisor's report was provided to the CAP.

MLPL has taken account of the independent procurement advisor's comments in its subsequent tender negotiations, noting that some of the feedback relates to technical engineering matters, rather than consumer issues. MLPL also acknowledges that the independent procurement advisor requested access to tender materials and meetings that could not be accommodated in some instances because of confidentiality and probity issues.

Procurement process

MLPL's procurement policy guides MLPL's approach to all procurement related activities and reflects the Commonwealth Procurement Rules. It therefore applies to the procurement of services to deliver the cable system scope of work. In referring to the Commonwealth Procurement Rules, MLPL notes that achieving value for money is a core objective, which requires that procurement processes should:

- encourage competition and be non-discriminatory;

- use resources in an efficient, effective, economical and ethical manner;
- facilitate accountable and transparent decision making;
- encourage appropriate engagement with risk; and
- be commensurate with the scale and scope of the business requirement.

In addition to adhering to the procurement policy, MLPL's procurement strategy for the cable system scope of work has been informed by our market analysis, including market soundings and the feedback from our consumer engagement. Our key objective is to deliver value for money, so that the resulting expenditure is prudent and efficient in accordance with the regulatory framework and our stakeholders' expectations.

The key matters that are addressed in our procurement strategy for the cable system scope of work are:

- The optimal approach for packaging the required works;
- The preferred contractual model; and
- Risk management.

As discussed below, MLPL's approach to each of these issues has been focused on delivering the best outcome for consumers.

Works packaging

MLPL considered that a single contract for submarine and land cable supply and installation, combined with HDD Landfall, would be preferable in terms of reducing interface risks and total costs for consumers. The contractual arrangements negotiated with Prysmian Powerlink reflect this preference, which MLPL considers to be an optimal outcome for consumers. Nevertheless, in conducting the tender process to maximise competition and achieve the best outcome for consumers, the cable system scope of work provided for the separate contracts for submarine and land cables, and a separate contract in relation to Landfall HDD. While the final contractual arrangements have combined these scopes of work, MLPL's strategy created maximum competitive tension for each work package to produce the best price-service outcome for consumers.

Contractual model

Following a review of alternative contractual arrangements, MLPL concluded that an Engineer, Procure, Construct (EPC) contractual model would provide the best scope for negotiating fixed prices and minimise contract management risks. MLPL developed bespoke EPC contracts to better reflect the key project requirements, covering a range of matters including risk allocation; performance requirements and guarantees; warranties; and liquidated damages.

Risk management

MLPL held several risk workshops to undertake an assessment of the risks, so that we could make best use of the workshop participants' combined experience and knowledge. These workshops focussed on identifying risks, developing risk mitigation measures and assessing how risks should be allocated to minimise the total costs to consumers. MLPL considers that this systematic approach to risk management has assisted in minimising the total costs of delivering the cable system scope of work, thereby ensuring that the resulting expenditure is prudent and efficient.

Tender outcomes

For the cable system scope of work, MLPL's tender strategy produced a highly competitive process involving the following 11 companies that responded to the pre-qualification document, which was issued on 6 August 2021:

- Sumitomo Electric Industries, Ltd;
- LS Cable & System Australia Pty Ltd;
- Nexans Norway AS;
- NKT HV Cables AB;
- Prysmian PowerLink S.r.l.;
- Zhongtian Technology Submarine Cable Ltd;
- Dredging International (Australia) Pty Ltd;
- Furukawa Electric Co Ltd;
- Hellenic Cables S.A. Hellenic Cable Industry Single Member Societe Anonyme;
- Ningbo Orient Wires & Cables Co Ltd; and
- Polycab India Limited.

Subsequently, four companies participated in the Request for Tender (**RFT**) phase of the procurement process, being Nexans Norway AS; Sumitomo Electric Industries Ltd; Prysmian PowerLink Srl; and NKT HV Cables AB. MLPL considers that the number of quality of companies entering the RFT process supported a competitive process. MLPL's procurement team subsequently conducted the following RFT process:

- Developed the RFT documents, in conjunction with the technical team, legal team and other internal stakeholders;

- Concurrent with the development of the RFT documents, developed the tender criteria for incorporation in the RFT documents, noting that these criteria are fixed throughout the RFT process;
- Obtained CEO approval to issue the RFT documents;
- Securely issued the RFT documents simultaneously using the MLPL Tender Portal;
- Securely responded to any questions during the tender periods, in conjunction with the technical team and other internal stakeholders; and
- Received and recorded receipt of tender offers and securely issued them to the evaluation team.

From a probity perspective, MLPL has ensured that each party has been afforded the opportunity to present their best offer terms possible for evaluation. MLPL has provided feedback to each party where their terms are ambiguous or are a significant departure from MLPL's expectations to allow them an opportunity to clarify and/or improve their offer.

Following the completion of the tender process, MLPL negotiated final terms and conditions with the shortlisted bidders. Prysmian Powerlink was selected as the successful bidder for the cable system scope of work in January 2024. Extensive negotiations regarding the remaining terms and conditions subsequently led to the execution of the contract in August 2024.

Prudency and efficiency

The competitive tender strategy developed and employed by MLPL was designed to maximise competitive tension between prospective service providers to deliver the best price-service outcome for customers. Specifically, as explained in this document:

- The cable system scope of work is consistent with the project requirements;
- MLPL has undertaken market analysis and market soundings to inform its approach to packaging works to maximise competition between prospective service providers;
- MLPL acted prudently and efficiently in securing cable capacity through a capacity reservation agreement with a prospective service provider, with payments being underwritten by the Commonwealth Government;
- MLPL has considered the feedback from consumers in developing its procurement approach;
- MLPL's procurement policy is consistent with the Commonwealth Procurement Rules, which has a core focus on ensuring that expenditure is efficiently incurred;
- The packaging of the required works has been designed to reduce interface risks (and costs), while maximising competition between service providers;

- The preferred contractual model was selected to encourage participation in the tender process and contribute to the efficient delivery of the proposed works; and
- MLPL's procurement strategy has been executed in accordance with a best practice procurement and probity plan.

These observations summarise why the price and service offering for the cable system scope of work, which were obtained through competitive tender processes, reflect prudent and efficient expenditure.

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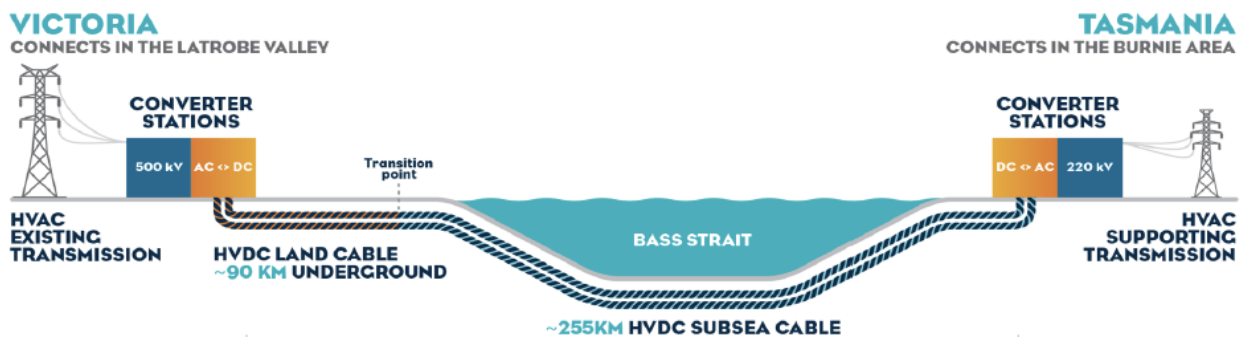
1 Introduction and overview

1.1 Purpose

Marinus Link is an infrastructure project of national significance which is expected to deliver substantial benefits to electricity consumers by reducing wholesale electricity costs. It involves the construction of approximately 255 kilometres of submarine HVDC cable and approximately 90 kilometres of underground HVDC cable in Victoria. It also includes converter stations in Tasmania and Victoria.

The total interconnection capacity will be 1500 MW, provided through two 750 MW cables which will be delivered in two stages. Figure 1 provides a schematic overview of Marinus Link.

Figure 1: Overview of Marinus Link



Marinus Link is part of a larger project, which is referred to as Project Marinus, which will be developed and owned by different entities. Marinus Link will be owned and operated by MLPL, while TasNetworks is responsible for the supporting transmission assets in Tasmania called North West Transmission Developments.

MLPL has commenced its revenue determination process, which is being undertaken by the AER in accordance with Part D, clause 6A.9 of the National Electricity Rules (**the Rules**) and the AER’s Commencement and Process Paper, which sets out the AER’s timetable and process for setting MLPL’s regulated revenues. The first part of that process was completed in December 2023 with the publication of the AER’s determination on MLPL’s Revenue Proposal – Part A (Early works).⁴

This supporting document forms part of MLPL’s Revenue Proposal – Part B (Construction costs). Specifically, it describes the scope of work required to supply and install the submarine cable and land cable in Victoria, so that Marinus Link can be delivered on time and on budget. The scope of work relates principally to the first

⁴ AER Determination, Marinus Link Stage 1, Part A (Early works), December 2023, page iv.

cable, but also includes work to facilitate the installation and commissioning of the second cable. This document also explains the procurement strategy that MLPL has adopted to ensure that its procurement of these services is prudent and efficient, which has bene the principal objective of MLPL’s procurement strategy.

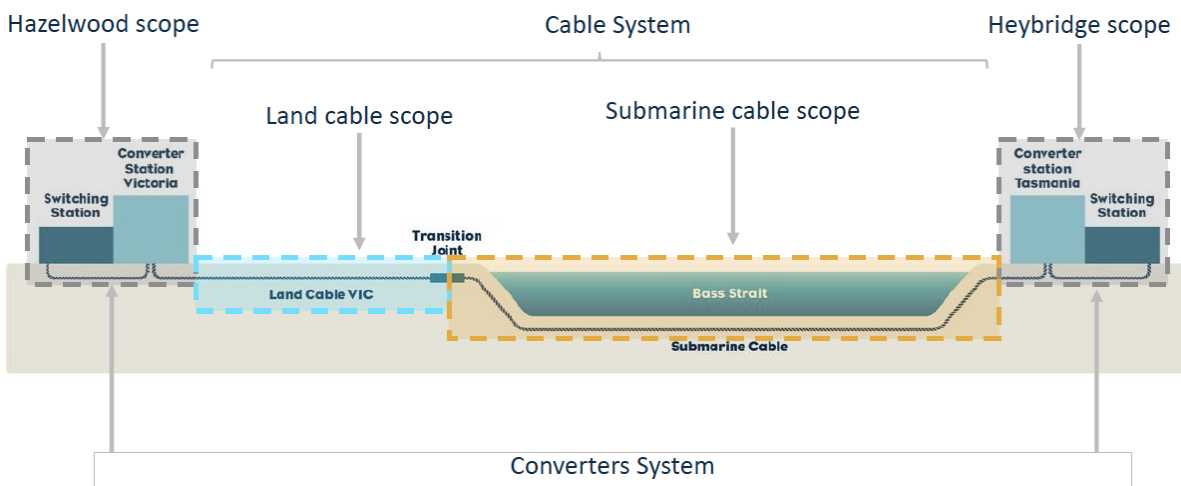
1.2 Scope

This section describes the cable system scope of work that is addressed by this document, including:

- An explanation of the proposed works and how they relate to the overall project, i.e., Marinius Link;
- A high level description of the activities that are included in this scope of work; and
- An overview of the different sources of risk that may affect the execution of the required works.

Figure 2 provides a schematic representation of the major work components that together comprise Marinius Link. As already noted, this document is focused on the cable system, which comprises the submarine cable and the land cable in Victoria. The provision of the converter station equipment is addressed in Attachment 1 and is outside the scope of this document.

Figure 2: Major components of Marinius Link



At a high level, the cable system scope of work includes the design, supply and installation of the submarine and land DC cable system, including earthing system and fibre optical telecommunication cables required for the cable monitoring systems and communication between the converter stations. The scope of work specified in the contract with Prysmian Powerlink also includes the Landfall HDD scope of work. Further information on the cable system scope of work is presented in sections 1.2.1 and 1.2.2 below, which explain the submarine and land cable works in turn.

1.2.1 Submarine cable supply and installation

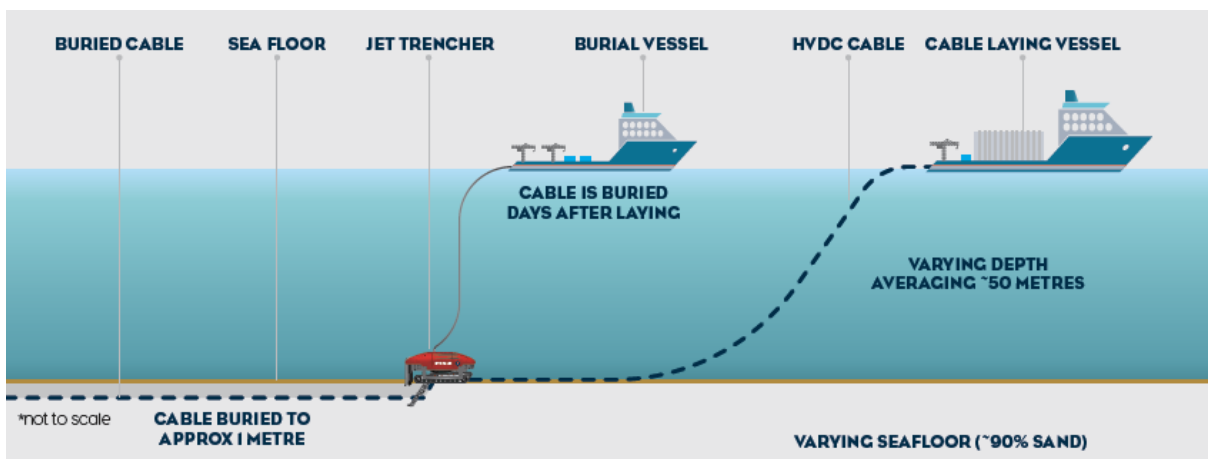
Before the construction phase of the project, a number of marine surveys and investigations were undertaken to determine the best route for the link, while minimising the environmental impacts to the seafloor. The marine surveys included scanning the seabed, taking samples of the seafloor, and identifying any debris that will need to be removed prior to the laying of the cable.

The cables will be manufactured in long continuous lengths. After being transported to Bass Strait, the cable laying vessel will travel along the cable route while gently lowering the cable onto the seafloor. Once the cables are on the seafloor, they will need to be protected from anchors and fishing activities. To protect the cables, they will be buried in sandy seabed using a water-jetting trenching machine. The water jetting trencher works by lowering two legs either side of the cable and pushing high-speed water into the seafloor. The cable then sinks into the seabed as material is softened and removed from below the cable.

During the laying operation it is important to monitor the water depth and current and to control the cable tension; the speed of the laying vessel; the laying route and the laying angle in order to ensure a successful installation. Seabed conditions are mostly similar (sand) along the project route, meaning that water-jetting will be used for the majority of the route. Where the seabed is hard, burial will be completed by using either a mechanical trencher or, concrete mattresses lowered above the cable.

Figure 3 depicts the installation process for the submarine cable.

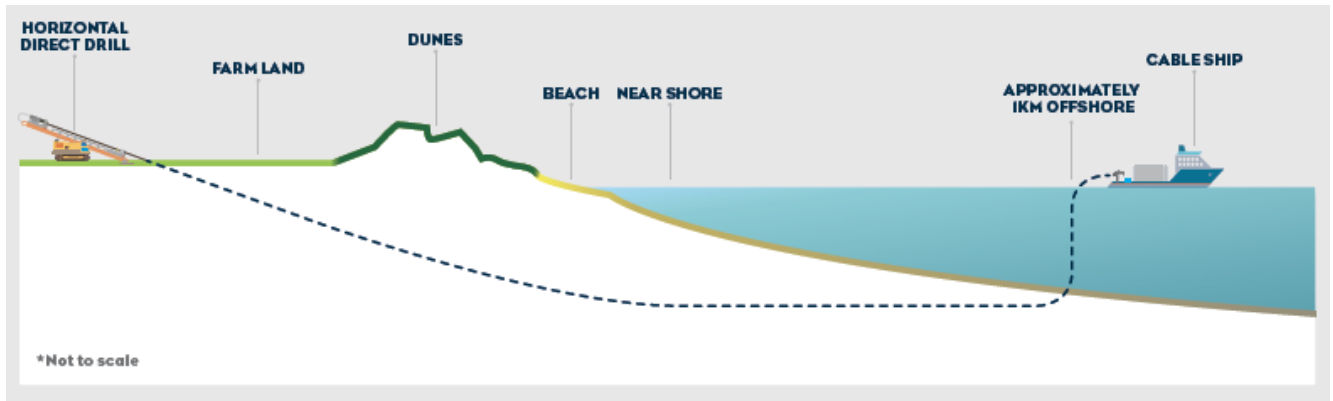
Figure 3: Installation of the submarine cable



The proposed route for the submarine cable has been chosen to avoid seabed habitats of significance. The cable installation process will cause disturbance of the seabed, but it is generally sparsely populated with marine plants and animals along the proposed route. Studies from similar subsea cable projects indicate post-construction impacts to the seabed are likely to be minimal and unlikely to be visible after one year due to the natural backfill of sediment. Long-term impacts on marine life and habitat are unlikely.

The Victorian shore crossing is proposed to be constructed using Landfall HDD, which is a construction method that uses a horizontal drill to create a bore hole for the cable under the ground, instead of a trench. The cable is then pulled through the bore hole by machinery. Figure 3 depicts the use of Landfall HDD to connect the submarine and the land cables.

Figure 4: Landfall Horizontal Direct Drilling



HDD is labour-intensive, and the ability to use HDD, as well as the length of time needed for drilling, depends on geology and other land conditions. In some conditions, it may take months to complete.

The Landfall HDD scope of work included in the contract with Prysmian Powerlink comprises:

- the stage 1 and stage 2 duct systems (including the pipes, grout, end caps, string lines and associated components and works) from onshore to a 10 metre water depth for the Victorian and Tasmanian landfall, and
- the stage 1 and stage 2 duct system (including the pipes, thermally stabilised backfill, bell mouths, end caps, string lines and associated components and works) from the Landfall HDD exit to the Transition Joint in Victoria including the joint bay, as defined in the contract with Prysmian Powerlink.

MLPL regards the inclusion of stage 2 works in the HDD Landfall scope of work as a prudent and efficient decision, given the likelihood that the second cable will proceed and the cost savings in undertaking this work in conjunction with the stage 1 works. Furthermore, MLPL considers that the additional disruption to local communities in conducting the two separate Landfall HDD exercises would be unacceptable from a social license perspective. On that basis, MLPL concluded that undertaking stage 1 and stage 2 Landfall HDD at the same time is the only credible option.

1.2.2 Land cable supply and installation

This scope of work involves the supply and installation of approximately 90km of HVDC interconnector cable laid on land and connected to the AC network in the Hazelwood area. The installation involves cable pulling

which depends on the successful completion of a containment system, consisting of approximately 90 km of power and communications ducts and jointing pits. The containment system and the associated land civil works are outside the scope of this document.

In broad terms, the scope of work relating to the manufacture and installation of land cables which is covered in this document includes:

- Engineering design;
- Manufacturing;
- Transport;
- Temporary works, such as access tracks, laydown areas and other facilities required to support installation;
- Installation;
- Subsystem testing;
- Integrated system commissioning; and
- Close out.

The land cables will be installed in lengths ranging from 800 to 1,300 metres. Land cables are not exposed to the same environmental influences as their counterparts in the sea. For weight reasons, land cables are usually equipped with an aluminium conductor, which makes them easier to transport and install.

The cable lengths will be connected at joint bays, which are concrete pits that are approximately 12 metres long, 2.5 metres wide and 2.5 metres deep, buried at least 0.5 metres below the ground.

1.2.3 Sources of risk and mitigation

A major infrastructure project such as Marinus Link will need to address a number of significant challenges, including various sources of risk and uncertainty. In relation to the cable system scope of work, a number of risks can be mitigated through careful planning and detailed studies. For example, to minimise the impact on marine habitat and avoid damage to reefs and other fragile ecospheres, the proposed route is surveyed in advance. Other risks, such as design risk, are also mitigated through planning.

In addition to the risks that can be mitigated through careful planning, there are construction related risks and uncertainties that inevitably arise in laying submarine cables. For example, specialised cable laying vessels are required for laying submarine power cables and it is only possible to use these vessels in particular weather conditions. The uncertainties associated with the weather need to be factored into the project schedule.

Other sources of construction delay may arise from unavailability of construction materials, variations and mistakes in programme scheduling, natural disasters, civil unrest or industrial action. As already noted, there is also a risk of damage to power cables caused by fishing vessels and anchor drag, as well as by changes in the seabed. This type of damage can occur where there is inadequate external protection. MLPL has considered this risk in its Cable Burial Risk Assessment report, which has informed our burial approach to mitigate anchor damage.

The contractual arrangements with Prysmian Powerlink addresses the different sources of risk and who bears them.⁵ In addition to the risks that arise from the project, interface risks arise because different elements of the project will be undertaken by different service providers. For example, one source of interface risk arises because the technical performance of the land cable will depend on the construction quality of the civil works.

MLPL has set out its minimum requirements⁶ in relation to interface management between Prysmian Powerlink and Hitachi Energy, the appointed converter station equipment contractor. These minimum requirements also extend to other appointed contractors and third parties, including the contractors appointed to deliver the Balance of Works, which covers the following scope:

- the detailed design, construction and installation of the balance of plant forming part of the converter stations, being the main converter interface transformers and the main converter valves, including supports; and
- the land cable civil works (including trenching works, HDD works⁷ and joint bays) and access roads.

Specifically, Prysmian Powerlink (and other appointed contractors) must develop an interface management plan which:

- includes a framework and process detailing how interfaces will be managed, comprising the identification, agreement, prioritisation, monitoring, reporting, resolution and close-out of interfaces;
- details how interface registers will be updated to ensure effective and efficient close-out of existing interfaces and treatment of new interfaces; and
- details procedures, meetings and coordination channels required to manage the interfaces in accordance with MLPL's requirements and interface registers.

⁵ Other sources of risk include social risk; financial risks; partnering risk; operating risk; change in law risk; and force majeure. For the purpose of this document, it is not necessary to discuss these risks other than to note that each must be addressed in the contractual arrangements so that it is clear how the risks will be mitigated, and residual risks allocated.

⁶ Marinus Link, Interface Management, DAS 4B1, April 2024.

⁷ The HDD works referred to relate to the laying of the land cable and exclude Landfall HDD works.

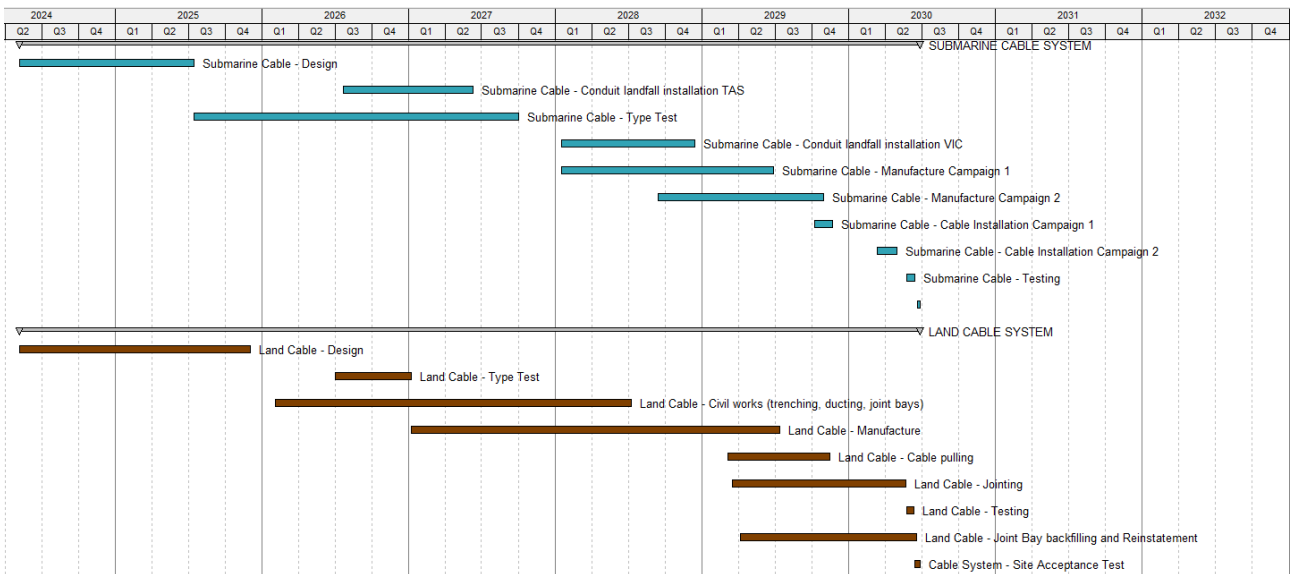
MLPL considers that these contractual arrangements will promote prudent and efficient outcomes by ensuring that the interfaces between the contractors and MLPL are actively managed.

1.3 Project timeframes

Marinus Link will be delivered in two stages, each comprising 750 MW of capacity. AEMO’s 2024 ISP has assessed the least cost solution as requiring first stage to be delivered in 2030-31 and the second stage as early as 2032-33, under the green exports scenario.⁸ MLPL is therefore progressing the construction of the first stage with the commencement of commercial operations by December 2030, with the timing of the second stage to be informed by AEMO’s 2026 and 2028 ISPs.

While the timing of the second stage is uncertain, the scope of work detailed in this document has been settled and is consistent with the contract with Prysmian Powerlink, which was executed on 1 August 2024. The cable design has commenced to enable site acceptance test in June 2030 and commencement of commercial operations in December 2030. Figure 5 below shows the timeline from cable design through to site acceptance testing, noting that the timeframes for completing the cable system scope of work may be affected by adverse weather conditions and other potential disruptions.

Figure 5: Timeline for cable system - from design to site acceptance test



Cable manufacturing and submarine cable installation are driving the critical path of the overall project schedule. In order to mitigate this risk, MLPL signed a Capacity Reservation Agreement that secures

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AEMO 2024 Integrated System Plan, Appendix 6. Cost Benefit Analysis, June 2024, page 63.

manufacturing slots and the cable vessel laying window availability with Prysmian Powerlink that enables the commencement of commercial operations by December 2030. While the converter stations are essential, they are not on the critical path at this point in time.

The project schedule relies on a set of assumptions about various factors influencing the project's timeline and outcomes. We will monitor and update these assumptions during the project to ensure that the schedule remains relevant and achievable in the face of real-world uncertainties.

1.4 Structure of this document

The remainder of this document is structured as follows.

- Chapter 2 provides a summary of our forecast expenditure;
- Chapter 3 discusses the market conditions and feedback from prospective service providers relating to the cable system scope of work, which has informed our procurement strategy;
- Chapter 4 explains our approach to consumer engagement and the feedback we have received in relation to our procurement approach;
- Chapter 5 discusses our procurement process and the steps MLPL has taken to ensure that it delivers the best outcome for consumers in relation to the cable system scope of work;
- Chapter 6 explains the tender evaluation process and outcomes for the cable system scope of work; and
- Chapter 7 explains why our proposed expenditure for the cable system scope of work is prudent and efficient.

2 Forecast expenditure

2.1 Forecasting period

In our Revenue Proposal – Part A (Early works), we explained that our early works expenditure covered the period from 1 July 2021 to 31 December 2024, which was consistent with the expected timing of MLPL’s Final Investment Decision (FID). Since the submission of that Revenue Proposal, the timing of FID has deferred to late May 2025 and, therefore, early works will continue beyond the original timeframe.

This document addresses MLPL’s cable system expenditure, which is construction expenditure rather than early works. The forecasts presented in this attachment includes ‘pre-period’ cable systems expenditure incurred or expected to be incurred prior to 1 July 2025 and excludes expenditure beyond 30 June 2030, which relates to commissioning and testing. The forecast cable systems expenditure in this attachment and our Revenue Proposal, therefore, will differ slightly from the total costs specified in the contract with Prysmian Powerlink.

2.2 Summary of forecast expenditure

Table 2 shows the forecast information for cable system that is provided to the AER on a confidential basis. The profile of our forecast expenditure reflects the project timings presented in section 1.3, and assumes that site acceptance testing will be completed by 30 June 2030.

Table 2: Forecast expenditure for cable system scope of work (\$m real 2023)⁹

	Pre-period ¹⁰	2025-26	2026-27	2027-28	2028-29	2029-30	Total
Cables design, supply and installation	33.7	74.2	24.9	118.2	365.6	138.9	755.6
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Additional costs (Adjustments)	-0.4	3.4	0.0	5.9	0.0	-0.9	8.0
Total expenditure	52.4	99.8	106.4	132.7	365.6	138.1	895.0

⁹ The forecast expenditure excludes testing and commission expenditure, which is expected to be incurred after 30 June 2030.

¹⁰ This includes MLPL’s pre-construction costs which were incurred prior to 1 July 2025.

The contract provides for 83 milestone payments for cables design, supply and installation, and 27 milestone payments for the Landfall HDD scope of work. In addition to these milestone payments, the contractor is also entitled to compensation payments for delay costs (including in relation to interface risks); costs incurred to accelerate or re-sequence work at the request of MLPL; and variations, as defined by the contract. The contract price is also subject to adjustments to account for market changes in the cost of metals and fuel, in accordance with indices specified in Schedule 2 of the contract, which are defined to capture the underlying cost components of the cables design, supply and installation and the Landfall HDD scopes of work.

The contractual arrangements provide a detailed list of applicable rates, including the following in relation to the cables design, supply and installation scopes of work:

- Personnel rates for project management, engineering (specialism) and administration;
- Mobilisation and demobilisation rates, standby rates and work rates for each of the crews, being:
 - onshore cable installation crew;
 - civil works crew;
 - commissioning crew; and
 - onshore jointing and termination crew.
- Rates for cable and accessory supply;
- Rates for construction equipment;
- Rates for work items – onshore and offshore; and
- Rates for spare parts – onshore and offshore.

A different set of rates apply to the Landfall HDD scope of work.

The contract rates have been established through a competitive tender and negotiation process, which is described in the next section. The forecast expenditure in Table 2 presents the 'base' contract costs for cable systems, including our best estimate of the price indices that will apply during the construction period. A separate risk allowance has been calculated to provide an estimate of the additional payments that are likely to be made under the terms of the contract in relation to delays and other variations.

For the reasons set out in this document and the related supporting information that accompanies the Revenue Proposal, MLPL considers that its forecast expenditure for the cable system scope of work satisfies the prudence and efficiency requirements in the Rules. Specifically, the forecasts reflect the outcome of an appropriately designed and executed competitive procurement strategy which has been focused on delivering

the best outcome for consumers in terms of price and service outcomes, including the timely delivery of Marinus Link.

3 Market review and implications

3.1 International supply and demand

In order to develop a procurement approach that delivers the best outcome for electricity consumers, it is essential to understand the supply and demand conditions for the cable system scope of work. As explained below, MLPL's market review identified existing and emerging constraints in relation to the submarine cable market. As a consequence, MLPL concluded that securing manufacturing slots would be essential if Marinus Link were to be delivered in accordance with the timeframes specified in AEMO's 2024 ISP.

MLPL's market review examined the existing HVDC cable projects over the period from 2021 to 2025. This review indicated that supply shortages are not expected for land cables. However, the supply and demand conditions for submarine cables were found to be much less favourable. In particular, the total cable demand for projects was estimated to be 19,162 km during the 2021 to 2025 period. Furthermore, approximately 60% of this demand is concentrated in the final two years of the period, indicating an emerging demand and supply imbalance. Looking forward, the war in Ukraine and increasing instability in the Middle East is exacerbating this imbalance as countries reassess their energy supply security needs.

Our research also indicated that:

- 38 HVDC cable projects have been identified with a medium to high likelihood of the projects materialising, 31 of these projects are located in Europe;
- There is a strong preference for procurers to engage established suppliers with extensive experience, noting that 10 of the 13 recent contracts have been awarded to two contractors with significant project experience;
- It is difficult to assess the available capacity for cables because it depends on the voltage level, insulation type, and cable application (i.e., on- vs offshore). Nevertheless, it is reasonable to conclude that submarine cables capacity is significantly constrained; and
- XLPE is becoming the dominant technology for HVDC submarine connections.

In summary, the specialist nature of the services, the long-lead time in submarine cable manufacturing and the desire to contract with experienced service providers has resulted in a highly constrained supply-side. The high inflation environment internationally is also creating additional risks for all parties, making it more challenging to secure contractors on favourable terms.

3.2 Market soundings

In addition to understanding the international conditions for the required scope of work, it is also important to engage directly with prospective service providers to obtain more specific information to inform MLPL's procurement strategy. In relation to the cable system scope of work, MLPL adopted the following approach to engage with suppliers:

- MLPL conducted a 'Request for Information' (RFI) process during 2019 and 2020 to obtain further information from suppliers; and
- MLPL met with submarine and land cable suppliers operating in the HVDC market during early 2021.

MLPL found that:

- Only Prysmian Powerlink, NKT and Sumitomo have completed HVDC submarine cable projects above 300 kV with XLPE insulation.
- ZTT, Nexans and LS Cable are expected to have completed HVDC submarine cable projects above 250 kV prior to FID which is expected in late May 2025; and
- There are more suppliers with land cable experience, including Furukawa and SüdKabel.

These market soundings confirmed that the market for service providers with the capacity to undertake the cable system scope of work is highly constrained. MLPL's discussions with prospective service providers also indicated a reluctance to undertake major civil works as part of the cable system scope.

3.3 Implications for MLPL's procurement strategy

The analysis presented in the previous two sections had implications for MLPL's procurement strategy to deliver the cable system scope of work prudently and efficiently, in accordance with the timeframes in AEMO's ISP. At a high level, the market analysis and soundings indicated that the following approach was most likely to attract well-qualified tenderers and create competitive tension between them:

- Ensure that Marinius Link is perceived to be a credible project, supported by ownership and funding certainty;
- Adopt packaging, delivery models and contract forms that are consistent with suppliers' reasonable expectations;
- Limit the number of tenders to maximise tendering participation and avoid tendering fatigue;

- Shorten the duration of the procurement process, as far as practicable; and
- Adopt a realistic approach to risk allocations and incentive arrangements, so that tenderers are not required to manage risks that are beyond their control.

More specifically, the market analysis and soundings indicated that it was not appropriate to adopt a three round RFT process for the cable system scope of work, which is established practice in the power industry. Instead, MLPL concluded that it was strongly preferable to adopt an accelerated procurement approach so that contractor(s) for the cable system scope of work could be secured by December 2023 or shortly thereafter.

The objective of instigating an accelerated procurement approach was to award a contract as soon as practicable, without exposing MLPL to unacceptable risk, based on compliant technical performance, commercial, schedule, quality, and safety terms. MLPL considered that an accelerated procurement approach would achieve the following benefits on behalf of customers:

- Complete the procurement activities on or before Q1 2024;
- Be ready for MLPL's final investment decision and issuing a 'Notice to Proceed' to the Contractor(s);
- Undertake a robust procurement process as efficiently as possible;
- Maximise tenderer competition in a constrained capacity market and minimise the total lifecycle cost;
- Achieve appropriate management and mitigation of identified risk;
- Achieve optimal technical and asset performance; and
- Establish contract terms with the objective of minimising variations and contractual disputes.

Subsequently, MLPL's market analysis and soundings informed its decision to enter into a Capacity Reservation Agreement (**CRA**) with one of the prospective service providers. Under the CRA, Prysmian Powerlink is required to maintain:

- submarine and land HVDC manufacturing capacity in its facilities in specified countries (Italy, the Netherlands or France); and
- installation capacity using appropriate vessels.

MLPL concluded that securing this capacity was necessary in order to achieve the planned completion of site acceptance tests for the cable works by 30 June 2030. As part of the Rewiring the Nation program, the Commonwealth agreed to underwrite the payment of the capacity reservation amount payable by MLPL under the CRA. From a consumer perspective, the CRA will deliver significant benefits by ensuring that the project is capable of being delivered in accordance with AEMO's optimal timing for the first cable, which is 2030.

4 Consumer engagement

4.1 Our approach

MLPL recognises the importance of engaging with consumers and other stakeholders to ensure that the project meets their expectations as far as practicable. Effective engagement is critical to identifying the social, environmental and cultural impact of the project, as well as securing and maintaining our social license.

Our consumer engagement program for Marinus Link commenced in 2018, when the feasibility of the project was first assessed. Further engagement occurred throughout 2019 to 2021 as TasNetworks undertook the Regulatory Investment Test for transmission. In April 2022, MLPL formally convened the CAP with the following objectives:

- To provide consumers with a genuine opportunity to participate in the development of MLPL's Revenue Proposals, especially on elements where consumer feedback can have the greatest impact;
- To provide a forum for participants to raise questions and concerns on behalf of the consumers they represent; and
- To enable MLPL to ensure that consumers' views and preferences are reflected in its Revenue Proposals.

In relation to procurement, MLPL has provided regular briefings to the CAP as we have developed our procurement approach. In providing these briefings, MLPL's engagement with the CAP has recognised that:

- Procurement decisions are likely to involve price-risk trade-offs, which will be of particular interest to consumers;
- Engineering issues, such as the choice of technology or construction techniques, are not matters that consumers can directly influence, and therefore are outside the scope of the engagement; and
- Probity considerations relating to commercially sensitive information limit the extent to which consumers can be actively engaged in the procurement process.

Given the commercial sensitivities and the technical nature of the negotiations, the CAP could not be directly involved in MLPL's procurement decision-making. Nevertheless, MLPL wanted to ensure that a consumer perspective was explicitly factored into our procurement approach. With this objective in mind, MLPL proposed that the CAP should appoint an independent procurement advisor to ensure that a consumer focus is adopted in the procurement process and to provide feedback to the CAP on any consumer issues arising.

The CAP accepted MLPL's proposal and jointly developed the following scope of work for the independent procurement advisor:

- Represent the CAP in the evaluation process for major items of procurement being the HVDC cable system and convertor stations;
- Provide the CAP with assurance advice on the procurement evaluation process;
- Ensure that the interests of the CAP are heard and considered in the procurement evaluation process;
- Provide insight and assurance to the CAP that the MLPL evaluation process is being followed and consumer interests are being incorporated;
- Liaise with MLPL’s probity advisor and provide feedback to the CAP on probity;
- Engage with MLPL’s evaluation team for each major procurement;
- Participate in the final meeting(s) of the MLPL’s procurement evaluation panel for each major procurement item; and
- Provide presentations and a written report to the CAP.

The CAP appointed Tate Consulting Services Pty Ltd as the CAP’s independent procurement advisor. The independent procurement advisor subsequently attended the meetings and briefings set out in Table 3, which are relevant to the cable system scope of work. At MLPL’s request, a representative from the AER also attended these meetings in an observer role.

Table 3: Meetings attended by the CAP’s advisor

Date	Topic
June 2023	<ul style="list-style-type: none"> • CAP Introductory meeting • Tender briefing • Evaluation Panel Meetings
July 2023	<ul style="list-style-type: none"> • Prequalification Briefing • Evaluation Panel Meetings
August 2023	<ul style="list-style-type: none"> • Evaluation Panel Meetings • Steering Committee Meeting • CAP Meetings on Information Access • Evaluation Panel Meetings
September 2023	<ul style="list-style-type: none"> • Steering Committee Meeting
October 2023	<ul style="list-style-type: none"> • Technical Evaluation

In addition to attending the above meetings, the independent procurement advisor was provided with additional briefings by MLPL’s subject matter experts. The advisor was also provided with 11 documents prepared by

MLPL, including the Evaluation and Probity Plan; Request for Tender packages; and Tender Evaluation Reports.

4.2 Consumer feedback and implications

During our broader engagement process, the CAP provided the following feedback which is relevant to MLPL's procurement approach:

- **Local suppliers.** The CAP has encouraged MLPL to consider how international suppliers can work with Australian partners to employ and support local suppliers.
- **Total project costs.** CAP members have consistently urged MLPL to keep consumers front of mind when making decisions, highlighting that many consumers are on fixed incomes that are not keeping up with inflation.

MLPL considered the implications of this feedback for its procurement approach, as follows:

- In relation to local suppliers, there is a small number of international suppliers with the necessary skills and experience to provide the cable system scope of work, as explained in sections 3.1 and 3.2. Nevertheless, MLPL undertook to encourage the successful tenderer(s) to engage with Australian entities to provide opportunities through subcontracting arrangements, where possible.
- In relation to effectively managing the total project costs, MLPL agrees with the CAP's observation that this is a key consideration for electricity consumers and MLPL's procurement process. In particular, MLPL recognises the importance of ensuring that the costs of delivering the proposed scope are prudent and efficient. Further details on how the procurement approach for cable systems will achieve this objective are provided in Chapter 5.

In addition to the high-level feedback from the CAP, the independent procurement advisor provided the following specific feedback on MLPL's procurement approach in relation to the cable system scope of work:

- **Schedule risk:** The independent procurement advisor considered that the risk of project delay is significant, given the global demand for services and the limited resource capacity.
- **Offshore trenching:** The independent procurement advisor commented that:
 - The primary trenching method of jet trenching is suitable for only 50% of the cable length;
 - The service provider will have to demonstrate that it has trenched at a minimum agreed speed to try to achieve the target. Any further work to achieve the burial target is likely to result in variations;

- The lack of spread specifications and track records for proposed spreads further elevate this risk; and
- While the offshore cable minimum burial depth of 1.0m is specified in the technical specifications, MLPL burial studies show that a burial deeper than 0.5m does not reduce the overall risk level.

Given the above observations, the independent procurement advisor commented that drivers and decision making on the burial depth should be made more transparent.

- **Offshore weather risks:** The independent procurement advisor observed that risks associated with departures from the commercial terms have not yet been fully costed. For example, the cable system proposals have not allowed for offshore weather risks. The advisor noted that all risks need to be assessed and costed in order to establish the total costs, prior to awarding contracts.
- **Payment milestones:** The independent procurement advisor commented that early payments to service providers will result in compounding interest payments, which tend to increase total project costs for consumers.

In addition to making these detailed observations, the independent procurement advisor criticised MLPL for not providing sufficient access to procurement meetings or tender documentation. A copy of the independent procurement advisor's report was provided to the CAP.

MLPL has taken account of the independent procurement advisor's comments, noting that some of the feedback relates to technical engineering matters, rather than consumer issues. MLPL also acknowledges that the independent procurement advisor requested access to tender materials and meetings that could not be accommodated in some instances because of confidentiality and probity issues.

In the next Chapter, MLPL provides details of its procurement approach to the cable system scope of work, having regard to the feedback described above and the market review discussed in Chapter 3.

5 Procurement strategy

5.1 Procurement policy

MLPL's procurement policy guides MLPL's approach to all procurement related activities and reflects the Commonwealth Procurement Rules, June 2023. The policy therefore applies to the procurement of services to deliver the cable system scope of work. Before setting out our tender design and approach for the cable system scope of work, it is useful to highlight the key principles in our procurement policy:

- **Value for money**

We will ensure that our resources are used in the most efficient, effective, ethical and economic manner. All procurement decisions will reflect value for money, not limited to price, consider sustainable and ethical principles including managing the risk of modern slavery, and maximise opportunities for local suppliers.

In referring to the Commonwealth Procurement Rules, MLPL notes that achieving value for money is the core objective of these rules. It requires that procurements should:

- encourage competition and be non-discriminatory;
- use resources in an efficient, effective, economical and ethical manner;
- facilitate accountable and transparent decision making;
- encourage appropriate engagement with risk; and
- be commensurate with the scale and scope of the business requirement.

- **Encouraging Competition**

Effective competition is a critical consideration for all our activities. When our people undertake procurement and commercial dealings, they will maintain impartiality and commercial confidentiality.

- **Appropriate purchasing**

Goods, services and capital works procured are fit for purpose, of sufficient standard and capable of fulfilling the intended requirements within an acceptable timeframe.

- **Transparency and fairness**

Our people will act with transparency and integrity and ensure fair dealings in arrangements with suppliers. They will adhere to principles of probity, accountability and disclosure and management of actual and perceived conflicts of interest.

- **Governance**

Our people understand their responsibility and accountability when committing, and authorising, expenditure. Our people must follow MLPL's risk management processes to identify, understand and mitigate risks when undertaking procurement activities.

At a high level, MLPL notes that adhering to this procurement policy will promote expenditure forecasts that are prudent and efficient, in accordance with the capital expenditure criteria in clause 6A.6.7(c) of the National Electricity Rules.

5.2 Procurement strategy

MLPL's procurement strategy for the successful delivery of the cable system scope of work was informed by our understanding of the required work; our market analysis, including market soundings and the feedback from our consumer engagement. As explained in our procurement policy, the key objective of our procurement strategy is to deliver value for money, which is consistent with the regulatory concept of ensuring that the resulting expenditure is prudent and efficient.

The key matters to be addressed in the procurement strategy for the cable system scope of work are:

- The optimal approach for packaging the works;
- The preferred contractual model; and
- Risk management.

We address each of these matters in turn.

5.2.1 Work packaging

Our market analysis in Chapter 3 explained that there is a small number of international suppliers with the necessary skills and experience to provide the cable system scope of work. These suppliers have limited involvement in the Asia Pacific region, which requires a procurement strategy that encourages their interest in Marinius Link in order to promote effective competition. The specialist nature of the required scope, together

with the limited number of suppliers, means that it is appropriate to establish a separate works package for the cable system scope of work.

MLPL's packaging strategy separated the Marinus link scope into discrete work packages, so that the cable system scope of work consists of submarine cables across Bass Strait and land cables in Victoria only. MLPL considered that a single contract for submarine and land cable supply and installation would be preferable. However, to maximise competition and achieve the best outcome for consumers, MLPL prepared separate scopes of work for submarine and land cables. This approach recognised the more specialised and limited availability for submarine cable service providers, as explained in Chapter 3. By separating the contracts, the submarine cable service providers would be subject to increased competition in relation to the land cables tender.

In relation to Landfall HDD, MLPL's preference was for that scope of work to be undertaken by the cable service provider. Similar to the approach to land cables, however, MLPL decided to negotiate the provision of Landfall HDD services separately. By separating this component, MLPL considered that it would maximise participation for each of the work packages, with the aim of achieving the best outcome for customers.

In summary, MLPL's approach to packaging the cable system scope of work was to develop separate work packages for submarine cables, land cables and Landfall HDD. In developing this approach, MLPL's expectation was that all three packages may be undertaken by a single service provider, thereby reducing interface risks and minimising contract management costs. Furthermore, by packaging these services separately, MLPL recognised that it would be able to negotiate the best outcome on behalf of consumers whether these packages were ultimately provided by one or more service providers.

5.2.2 Contractual models

For the packages of work described in the previous section, MLPL assessed the suitability of alternative contractual models based on:

- **Utility** – Is the contract appropriate to deliver the proposed works package?
- **Compatibility** – Is the contract generally compatible with other contracts for other services sought by MLPL?
- **Market appetite** – Will the head contractors be likely to bid for this contractual model and accept the associated risk profile?

Based on this review, MLPL concluded that an Engineer, Procure, Construct (**EPC**) contract model was preferred. Under this model, the contractor is engaged to design, build and deliver the asset. Functionality requirements are determined by the owner. The contractor is responsible for satisfying the technical and cost

brief generally with minimal client input. It therefore provides greater scope for fixed prices, assuming that an appropriate risk allocation is adopted which is acceptable to prospective service providers.

In adopting the EPC contract form, MLPL developed bespoke contracts to better reflect the key project requirements, covering matters such as:

- Contract language;
- Governing law;
- Desired risk allocation;
- Performance requirements and guarantees;
- Securities;
- Warranties;
- Liquidated damages; and
- Key performance indicators.

These items were transformed into a proposed agreement that forms a mix of standardised and project-specific clauses.

5.2.3 Risk management

To minimise the total expected costs of the project, risks must be identified, managed and appropriately allocated between MLPL and the relevant service provider. These project risks include interface risks, which arise from engaging different service providers to deliver particular components of the project, including the service providers that are delivering the converter station and land cable civil works.

As explained in section 1.2.3, all contractors will be required to develop an Interface Management Plan which addresses how the parties will work together to achieve delivery of the overall project scope. Mechanisms within the individual package agreements will also support effective management and mitigation of interface risk (i.e., interface milestones and delay liquidated damage regimes, design management, handover inspection and acceptance regimes for key interface points). MLPL considers that these contractual arrangements will assist in mitigating interface risk.

MLPL held several risk workshops commencing in 2020 to undertake a qualitative assessment of the risks based upon participants' combined experience and knowledge. The workshop focussed on identifying risks,

developing risk mitigation measures and assessing how risks should be allocated to minimise the total costs to consumers. In particular, each risk was categorised by using one of the following allocations:

- Transfer the risk to the service provider;
- Retain the risk, mitigate it and monitor it;
- Mitigate the risk and transfer the residual risk to the service provider;
- Service provider mitigates the risk and transfers the residual to MLPL;
- Shared risks between the service provider and MLPL; and
- Undertake further investigate of the risk.

These risk assessments were completed by March 2022, so that they could be reflected in the:

- Technical requirements and specifications for the cable system scope of work; and
- Bespoke contract for the cable system scope of work, which is provided to prospective service providers as part of the RFT documentation.

MLPL considers that this systematic approach to risk management will contribute to minimising the total costs of delivering the system cable scope of work, thereby ensuring that the forecast expenditure is prudent and efficient.

5.3 Tender timelines

Table 4 sets out the planned timelines for executing the procurement strategy described in the previous section. It shows that the tender process for cable system scope of work has been completed. The key decision points and approvals have been shaded in the table below.

Table 4: Planned timetable for executing the procurement strategy

Activity	Estimated timing (Calendar Year)
Preparation of tender pre-qualification documents for the cable system scope of work	Q3 2021
Board approval of tender pre-qualification for the cable system documentation	Early Q4 2021
Prequalification process for the cable system scope of work	Late Q4 2021

Activity	Estimated timing (Calendar Year)
Steering Committee approval of proposed applicants to participate in the Request for Tender (RFT) process	Q4 2021
Prepare RFT documentation for the cable system scope of work	Q4 2021 to Q4 2022
MLPL Board approval of Tender Readiness Decision Gate	Q3 2022
Submarine and land cable RFT issued	Q4 2022
Board and State/Commonwealth approvals of proposed successful tenderers for the cable system scope of work	Q4 2023
Cable system scope of work contract(s) ready for award	Q1 2024
Contract signing for the cable system scope of work	Q4 2024

Note: Key decision points and approvals are shaded

As explained in further detail in the next Chapter, the cable system contract was executed on 1 August 2024, which was slightly ahead of the planned schedule shown above.

6 Tender evaluation and expenditure forecasts

6.1 Introduction

As explained in the previous chapter, MLPL's packaging decision for the cable system scope of work sought to maximise competition by preparing separate scopes of work for the submarine cables, land cables and Landfall HDD, notwithstanding MLPL's preference to appoint a single service provider to deliver all tasks. The purpose of this Chapter is to explain our tender evaluation process and the resulting expenditure forecasts. The forecast expenditure for the cable system scope of work is commercially sensitive as the tender process for the Balance of Work is on-going. For that reason, our expenditure forecasts for cable systems have been redacted in this document.

6.2 Submarine and land cables tender evaluation

Pre-qualification is an expression of interest process to invite and select participants to participate in the procurement. The pre-qualification invitation is open to any company or consortium of companies that wishes to qualify to receive a Request for Tender (**RFT**). Only those companies that submit their candidature in compliance with the stipulations of the pre-qualification criteria may be selected to participate in the RFT phase of the procurement. The pre-qualification criteria contain the minimum qualitative requirements that must be met by the prospective service provider.

In accordance with the approved Marinius Link HVDC Cable System Procurement Plan version 0.4 dated 30 July 2021, a Pre-Qualification Document was issued on 6 August 2021, with a closing date of 24 September 2021. The following companies responded to the pre-qualification invitation:

- Sumitomo Electric Industries, Ltd;
- LS Cable & System Australia Pty Ltd;
- Nexans Norway AS;
- NKT HV Cables AB;
- Prysmian PowerLink S.r.l.;
- Zhongtian Technology Submarine Cable Ltd;
- Dredging International (Australia) Pty Ltd;

- Furukawa Electric Co Ltd;
- Hellenic Cables S.A. Hellenic Cable Industry Single Member Societe Anonyme;
- Ningbo Orient Wires & Cables Co Ltd; and
- Polycab India Limited.

Subsequently, four companies participated in the RFT phase of the procurement process, being Nexans Norway AS; Sumitomo Electric Industries Ltd; Prysmian PowerLink Srl; and NKT HV Cables AB. MLPL considers that the number of quality of companies entering the RFT process supported a competitive process. In taking this view, MLPL was also conscious that increasing the numbers of bidders at the RFT phase may have discouraged one or more companies from participating.

The process followed by MLPL's procurement team to conduct the RFT is summarised below:

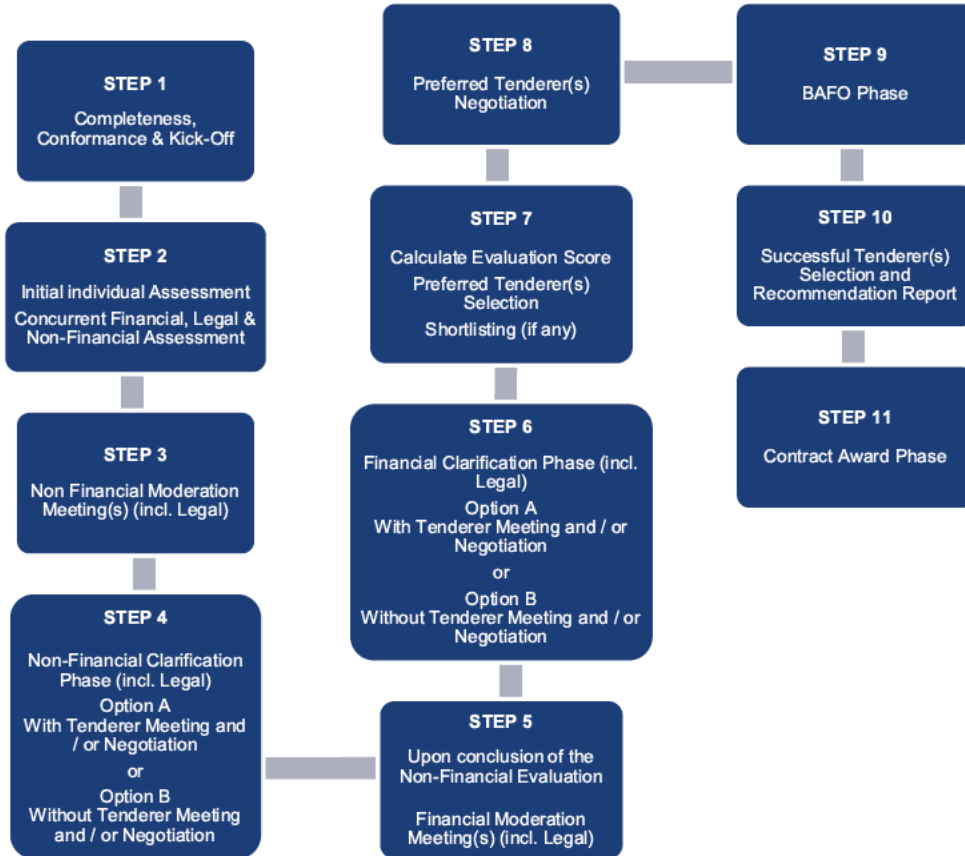
- Developed the RFT documents, in conjunction with the technical team, legal team and other internal stakeholders;
- Concurrent with the development of the RFT documents, developed the tender criteria for incorporation in the RFT documents, noting that these criteria were fixed throughout the RFT process;
- Obtained CEO approval to issue the RFT documents;
- Securely issued the RFT documents simultaneously using the MLPL Tender Portal;
- Securely responded to questions during the tender periods, in conjunction with the technical team and other internal stakeholders; and
- Received and recorded receipt of tender offers and securely issued them to the evaluation team.

The evaluation of tender offers is governed by MLPL's Evaluation and Probity Plan, which was endorsed by MLPL's Procurement Review Group and O'Connor Marsden, and approved by MLPL's Project Director, in early December 2022. All Evaluation Team members, as well as the Chair, were appointed on the basis of their recognised knowledge and experience in their chosen fields. During the evaluation process, the Evaluation Team were supported by various Subject Matter Experts (**SMEs**), as identified in the Evaluation and Probity Plan.

A representative from the AER attended RFT Steering Committee meetings conducted during the evaluation period. An independent advisor appointed on behalf of the Marinus Link CAP also attended Evaluation Team Moderation Meetings as an observer.

Tender Offers were evaluated for each package using both non-financial and financial evaluation criteria, as shown in the 11 step process in Figure 6 below.

Figure 6: MLPL’s tender evaluation and negotiation process



Following the completion of the tender process, MLPL negotiated final terms and conditions with the shortlisted bidders. Prysmian Powerlink was identified as the successful bidder for the submarine and land cables in January 2024, and the contract was executed in August 2024 following extensive negotiations.

6.3 Cable system expenditure forecasts

Table 5 below shows the expenditure forecasts for the cable system scope of work, which reflects the expected timing of the milestone payments.

Table 5: Forecast expenditure for cable system scope of work s (\$m real 2023) ¹¹

	Pre-period ¹²	2025-26	2026-27	2027-28	2028-29	2029-30	Total
Cables design, supply and installation	33.7	74.2	24.9	118.2	365.6	138.9	755.6
Landfall HDD Costs	19.0	22.2	81.5	8.6	0.0	0.0	131.4
Additional costs (Adjustments)	-0.4	3.4	0.0	5.9	0.0	-0.9	8.0
Total expenditure	52.4	99.8	106.4	132.7	365.6	138.1	895.0

The contract price is also subject to adjustments to account for market changes in the cost of metals and fuel, in accordance with indices specified in Schedule 2 of the contract. The table shows our best estimate of these price indices, which are expected to result in slightly lower costs than the base amounts specified in the contracts.

In addition to cost forecasts shown in Table 5, the contractor is also entitled to compensation payments for delay costs (including in relation to interface risks); costs incurred to accelerate or re-sequence work at the request of MLPL; and variations, as defined by the contract. A separate risk allowance has been calculated to account for the expected compensation payments.

¹¹ The forecast expenditure excludes testing and commission expenditure, which is expected to be incurred after 30 June 2030.

¹² This includes MLPL's pre-construction costs which were incurred prior to 1 July 2025.

7 Why is our proposed expenditure prudent and efficient?

7.1 Rules requirements

Clause 6A.6.7(c) of the Rules states that the AER must accept the forecast of required capital expenditure of a TNSP that is included in a Revenue Proposal if the AER is satisfied that the total of the forecast capital expenditure for the regulatory control period reasonably reflects each of the following (capital expenditure criteria):

- (1) the efficient costs of achieving the capital expenditure objectives;
- (2) the costs that a prudent operator would require to achieve the capital expenditure objectives; and
- (3) a realistic expectation of the demand forecasts and cost inputs required to achieve the capital expenditure objectives.

To paraphrase, this provision indirectly places an obligation on MLPL, as an Intending TNSP, to demonstrate that its forecast capital expenditure to deliver Marinus Link is prudent and efficient. While this obligation applies to MLPL's total forecast capital expenditure, in practice prudence and efficiency can only be demonstrated by testing whether each category of expenditure is prudent and efficient. Specifically, in relation to the cable system scope of work, MLPL considers it appropriate to explain why the AER should be satisfied that the forecast expenditure presented in this attachment is prudent and efficient.

7.2 Supporting evidence

The competitive tender strategy developed and employed by MLPL has been designed to maximise competitive tension between prospective service providers to deliver the best price-service outcome for customers. Specifically, as explained in this document:

- The cable system scope of work is consistent with the project requirements, as detailed in Chapter 2;
- MLPL has undertaken market analysis and market soundings to inform its approach to packaging works to maximise competition between prospective service providers, as detailed in Chapter 3;
- MLPL acted prudently and efficiently in securing cable capacity through a capacity reservation agreement with Prysmian Powerlink, with payments being underwritten by the Commonwealth Government;

- MLPL has considered the feedback from consumers in developing its procurement approach, as explained in Chapter 4;
- MLPL's procurement policy is consistent with the Commonwealth Procurement Rules, which has a core focus on ensuring that expenditure is efficiently incurred, as explained in Chapter 5;
- The packaging of the required works has been designed to reduce interface risks (and costs), while maximising competition between service providers, as explained in Chapter 5;
- The selection of the preferred contractual model is intended to encourage participation in the tender process and contribute to the efficient delivery of the proposed works, as explained in Chapter 5; and
- MLPL's procurement strategy has been executed in accordance with a best practice procurement and probity plan, as explained in Chapter 6.

The points set out above summarise why the price and service offering for the cable system scope of work, which were obtained through competitive tender processes, reflect prudent and efficient expenditure. MLPL expects to work closely with the AER to further demonstrate that our expenditure forecasts presented in this attachment is prudent and efficient, following the submission of our Revenue Proposal.