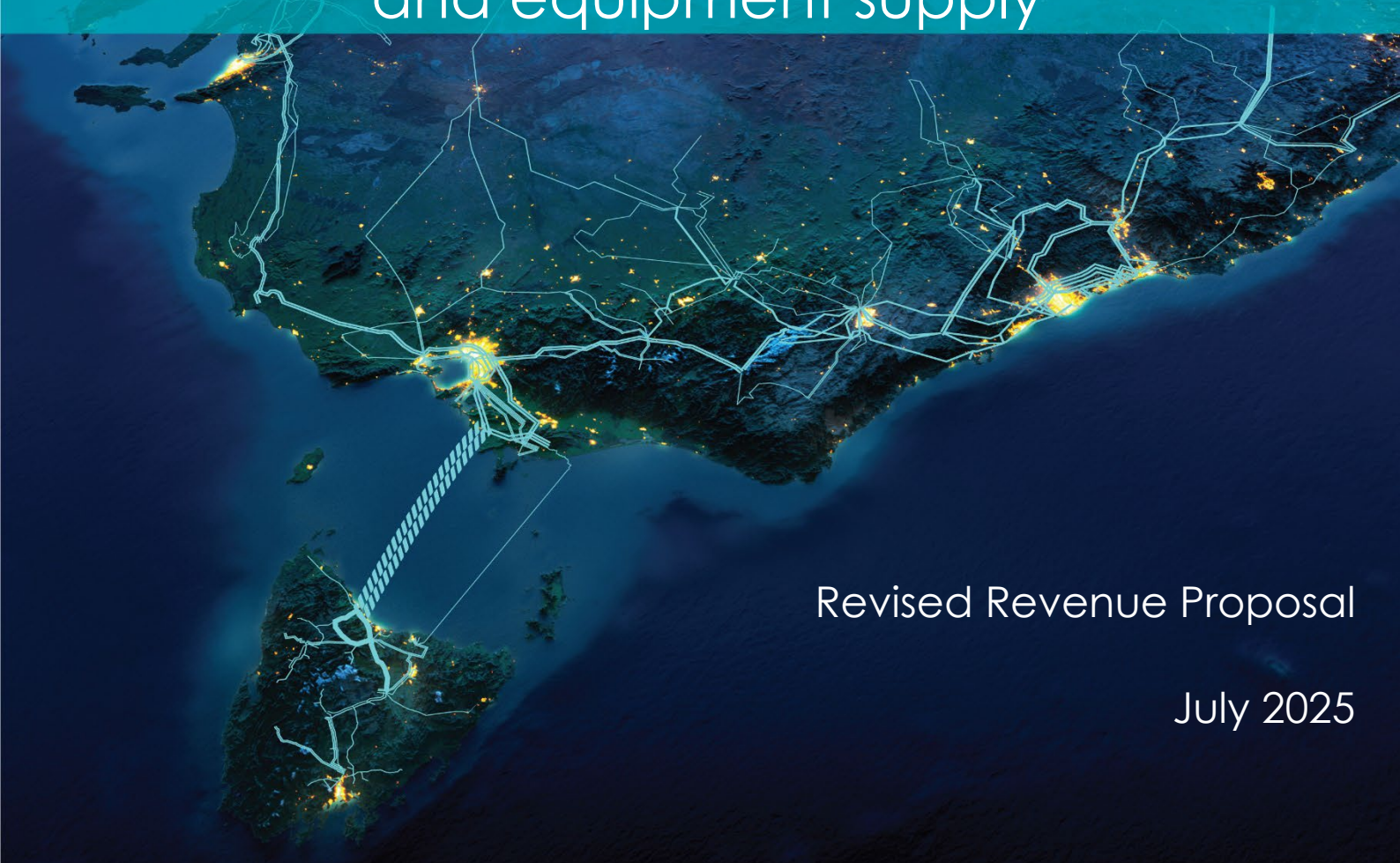
MARINUS LINK

Explanation of Capital Expenditure Requirements

Attachment 1: Converter station design and equipment supply



Revised Revenue Proposal

July 2025

Responsibilities

This document is the responsibility of the Marinus Link Team, Marinus Link Pty Ltd, 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 revised Revenue Proposal – Part B (Construction costs). This document relates to converter station equipment, which is the subject of a package of work that has been awarded to Hitachi Energy and the contract was executed on 1 May 2024. The purpose of this document is:

- To describe the activities relating to the design, test, manufacture, supply and commissioning of the converter station equipment to enable Marinus Link to be delivered on time and on budget.
- To explain MLPL's approach to procuring these services through a competitive tender process that has been designed to achieve the best outcome on behalf of customers in relation to price, timing and service performance.

This converter station equipment scope of work is one of three packages of work that are subject to separate competitive tender processes. The remaining packages of work are:

- Submarine and land cables, which was awarded to Prysmian Powerlink in August 2024. This scope of work includes:
    - to design, engineer, construct, test and commission the HVDC cable system (including the cables, cable accessories and fibre optic apparatus);
    - the landfall horizontal directional drilling (**HDD**) works; and
    - the cable monitoring system.
- Balance of Works, noting that the tender process was completed in June 2025 and contract negotiations are currently on-going. This scope of work includes:
    - 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 works and joint bays) and access roads.

An explanation of these work packages is provided in separate supporting documents that also form part of MLPL's revised Revenue Proposal – Part B (Construction costs). While this document is focused on the

converter station equipment scope of work, procurement strategy and forecast expenditure, where relevant we comment on the project more broadly and the other work packages.

The expenditure forecasts and the information presented in this document are substantially unchanged from the Revenue Proposal, with the exception of updates to reflect minor variations and changes in exchange rates and price indices. The total increase is $36 million in real 2023 prices, of which $18.7 million relates to the following agreed variations:

- A change in the takeover date in accordance with a formal notification by MLPL, which extends the completion milestones by 9 months.
- An updated scope of work for the connection between MLPL Heybridge converter AC hall and the Heybridge switching station primary connection point, which now includes the design and supply of three 220kV AC wall bushings.
- An increase of the auxiliary power supply capacity to 2.0 MVA.
- The technical specification for the indoor DC switchyard room (DC Hall) was initially specified at 35 degrees Celsius. Subsequently, Hitachi issued an RFI recommending that the DC Hall temperature is increased to 50 degrees Celsius at Heybridge Station and to 60 degrees Celsius at Hazelwood Station, so as to reduce future operational costs. The cable contractor confirmed this increase would be acceptable, and MLPL determined that increasing the DC Hall Temperature would be a benefit to the project.

MLPL notes that the AER approved the capital expenditure forecasts presented in the Revenue Proposal, and it is therefore expected that the minor updates in this document will be accepted by the AER in its supplementary Draft Decision.

Scope and timeline

Marinus Link will be delivered in two stages, with each stage providing 750 MW of interconnector capacity between Tasmania and Victoria. AEMO's Integrated System Plan (**ISP**) 2024 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.

While the timing of the second stage is uncertain, the scope of work detailed in this document has been designed to enable the first stage to be delivered and to facilitate the efficient commissioning of the second stage.

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[1] AEM0 2024 Integrated System Plan, Appendix 6. Cost Benefit Analysis, June 2024, page 63.

Forecast expenditure

Table 1 presents our updated forecast expenditure for converter station equipment, which reflects the terms and conditions of the contract awarded to Hitachi Energy. These terms and conditions were settled following intensive negotiations, including MLPL's negotiation team members co-locating in New Delhi to resolve outstanding contractual terms and conditions.

Table 1: Forecast expenditure for converter station equipment ($m real 2023)[2]

	Pre-period[3]	2025-26	2026-27	2027-28	2028-29	2029-30	Total
Equipment design and supply	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Contract indexation	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Total expenditure	**99.7**	**104.2**	**338.9**	**95.6**	**79.5**	**55.3**	**773.2**

The contract provides for 35 milestone payments and adjustments for delay costs; disruption costs and variations, as defined by the commercial terms. The contract price is also subject to change in accordance with indices specified in the contract, including indices relating to the price of copper, hot steel, labour and special impregnated paper used in the interface transformers. The forecast expenditure presented in Table 1 reflects the expected timing of the milestone payments and the impact of indexation.

In addition, a separate risk allowance has been estimated to account for the additional costs that MLPL expects to pay in accordance with the contract terms as a result of delay, disruption and variations as defined in the contract as 'compensation events'. The risk allowance is explained in Attachment 7 to this revised Revenue Proposal.

Market review and implications

MLPL's procurement strategy was informed by a review of the international market for the design, supply and commissioning of interconnector assets and extensive market soundings with prospective service providers. The insights obtained through this work helped ensure that MLPL attracted well-qualified tenderers and creates competitive tension between them, so that the best price-service outcome is obtained on behalf of customers.

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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.

The key findings from this review were:

- The war in Ukraine and increasing instability in the Middle East have led many countries to re-examine their energy supply security, leading to the acceleration of offshore wind development and higher demand for interconnector capacity (and converter stations).

- The majority of the demand for HVDC interconnector and related offshore wind connector capacity is in Europe and to a lesser extent North America. As a consequence, the small number of international suppliers with the necessary skills and experience to meet MLPL's requirements will, at best, only have limited experience of operating in the Asia Pacific region; and

- Our market soundings confirmed that the service providers for the provision of converter station equipment enjoy significant market power. As a consequence, MLPL concluded that a specific works package should be designed to deliver this scope of work, so that market power enjoyed by prospective service providers could not be leveraged to reduce competition in relation to other elements of the project.

Consumer engagement

During our engagement process, the Consumer Advisory Panel (**CAP**) provided the feedback which we considered in developing our MLPL's procurement approach, including the following points:

- **Local suppliers**. The CAP has encouraged MLPL to consider how international suppliers can work with Australian partners to employ and support local suppliers. The CAP has expressed support for a strong weighting on Australian industry participation.

- **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 has taken this feedback into account in developing its procurement strategy. In addition, MLPL considered it important that a consumer-perspective was explicitly reflected in its 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 meetings and review documentation on behalf of consumers.

The independent procurement advisor provided feedback to MLPL on a wide range of matters relating to equipment design; supply and commissioning; schedule risk, technology risk and payment milestones. In addition to raising queries regarding these project issues, the independent procurement advisor expressed concern that MLPL had not provided 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 feedback, noting that some of the issues raised relate to technical engineering matters that were outside the scope of his engagement. 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 strategy

MLPL's procurement policy guides MLPL's approach to all procurement related activities and reflects the Commonwealth Procurement Rules. In referring to the Commonwealth Procurement Rules, MLPL notes that achieving value for money is a core objective, which requires that procurement processes should:

a. encourage competition and be non-discriminatory;

b. use resources in an efficient, effective, economical and ethical manner;

c. facilitate accountable and transparent decision making;

d. encourage appropriate engagement with risk; and

e. be commensurate with the scale and scope of the business requirement.

In addition to adhering to the procurement policy, MLPL's procurement strategy has been informed by our understanding of the scope of work, our market analysis, including market soundings and the feedback from our consumer engagement. The objective of our procurement strategy 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 converter station equipment are:

- The optimal approach for packaging the works;
- The preferred contractual model; and
- The arrangements for managing interface risks.

For each of these matters, our approach has focused on achieving a prudent and efficient outcome of behalf of electricity customers. Our probity advisor, O'Connor Marsden & Associates (OCM), has continued to have oversight of MLPL's procurement process and has provided a letter confirming MLPL's procurement process has been conducted substantially in accordance with approved plans, with no probity issues arising.[4]

[4] O'Connor Marsden & Associates Pty Limited letter to [redacted], MLPL, Head of Procurement, 24 April 2024.

Tender outcomes

For converter station equipment, MLPL's procurement strategy produced a highly competitive tender process. In accordance with our procurement plan, a pre-qualification document for converter station equipment scope of work was issued on 6 August 2021, with a closing date of 24 September 2021. The following companies responded to the pre-qualification invitation:

- ABB Power Grids Sweden (later Hitachi Energy);
- GE Grid Solutions Limited;
- NARI Technology Co Ltd;
- Siemens Energy Global GmbH & Co; and
- Toshiba International Corporation Pty Ltd.

Subsequently, three of these companies participated in the Request for Tender (**RFT**) phase of the procurement process, being Hitachi Energy, GE Grid Solutions, and Siemens Energy Global GmbH & Co. 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 to the participants using the MLPL Tender Portal;
- Held interactive workshops with bidders to answer questions on the tender requirements;
- 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.

Tender offers were received from GE Grid Solutions and Hitachi. Siemens formally notified MLPL on the 3 March 2023 that they would not be participating further.

A change in the project delivery schedule was made in October 2023, which required both tenderers to update their offers. The amended stage 1 scope reflected appropriate engineering and design work for the provision of two converter stations at each of the two sites during stage 1 to facilitate a future stage 2. Following a

detailed evaluation of the updated tender responses, in April 2024 Hitachi was selected as the preferred bidder for the converter station equipment design, supply and commissioning scope of work. On 1 May 2024, the contract negotiations for the converter station equipment were concluded and the contract signed.

Prudency and efficiency

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 scope of work for converter stations 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 has considered the feedback from our CAP in developing its procurement approach;
- MLPL's procurement approach 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; and
- MLPL's procurement strategy has been executed in accordance with a best practice procurement and probity plan.

The points set out above summarise why the price and service offering for converter stations, which were obtained through a competitive tender process, reflects prudent and efficient expenditure.

MLPL welcomes the AER's conclusion in its Initial Draft Decision that it has conducted a best practice tender process for cables and converter station equipment:[5]

> "The government, AER and consumer representatives [observers during the tender process] each had significant experience in conducting high value public tender processes. To maximise compliance with the expectations of both governments and the AER, the Marinus evaluation and review teams regularly sought feedback from the observers. Each of the observers was satisfied that the process was conducted to a high standard, sustained competitive tension, and was consistent with industry norms and with government procurement requirements."

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[5] AER, Initial Draft Decision - Marinus Link Stage 1, Part B (Construction costs), Transmission Determination 2025-30, May 2025, page 15.

As already noted, the AER approved our capital expenditure forecasts for cables and converter station equipment as presented in our Revenue Proposal. MLPL therefore expects the AER to approve the minor updates in this document to address variations and adjustments to account for the latest available information regarding exchange rates and price indices.

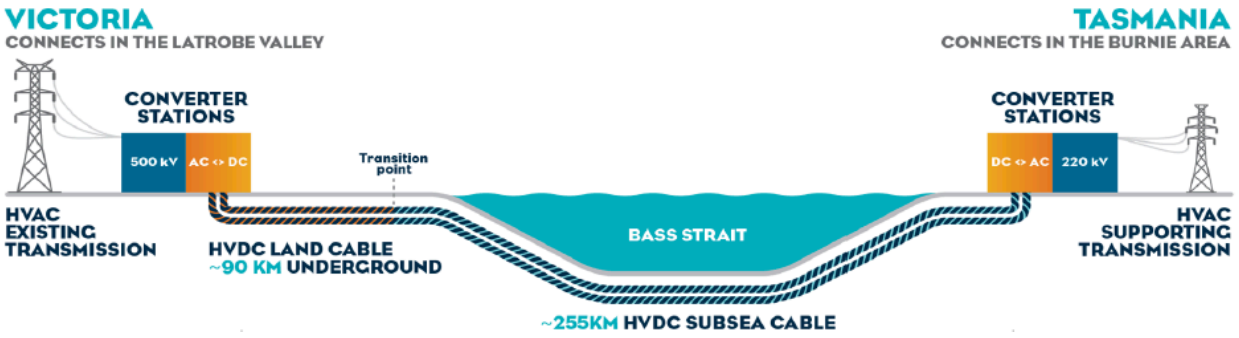
Contents

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 undersea High Voltage Direct Current (**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 will progress the 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 (**Rules**). In accordance with those provisions, the AER updated its Commencement and Process Paper in November 2024, 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).[6]

This supporting document forms part of MLPL's revised Revenue Proposal – Part B (Construction costs). This document is largely unchanged from Attachment 1 that was submitted as part of our Revenue Proposal in November 2024, with updates to account for contract variations, exchange rate movements and updated price indices. The AER published its Initial Draft Decision on 16 May 2025, which accepted MLPL's forecast

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

expenditure for converter station equipment at that time. It is therefore expected that the AER will accept the updates to the forecast expenditure, which reflect the latest available information and the executed contract with Hitachi Energy.

This document describes the activities related to the manufacturing, construction and commissioning of HVDC/HVAC converter stations that MLPL is undertaking to enable Marinus Link to be delivered on time and on budget. We explain our process to ensure that the procurement of these services is prudent and efficient.

1.2 Scope

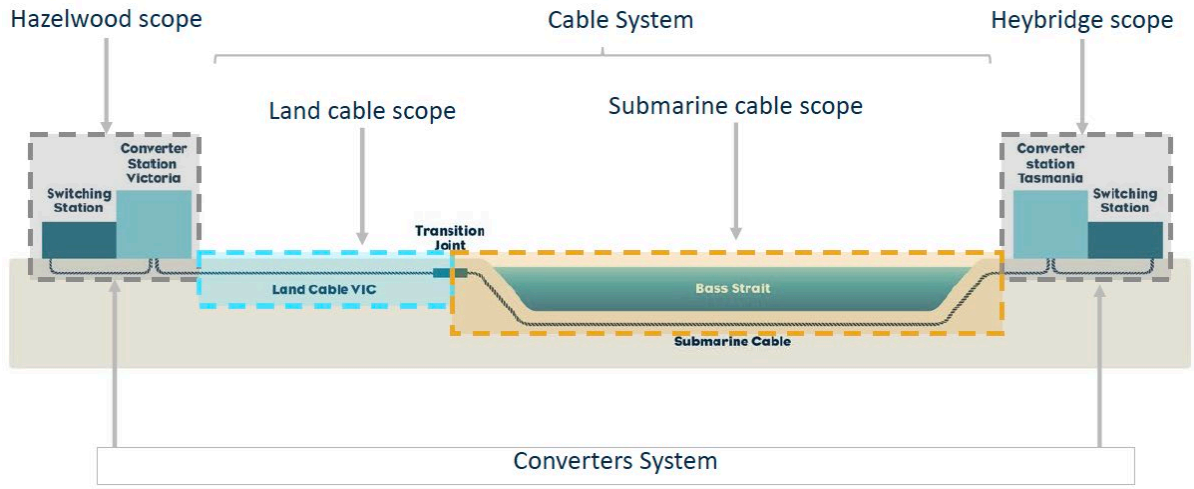
This section describes the scope of work that is addressed by this document, including:

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

Figure 2 provides a schematic representation of the major work components that together comprise Marinus Link. This document is focused on the converter station equipment, and therefore does not address:

- the provision of the HVDC cable systems, comprising the land cable in Victoria and the submarine cable;
- the land cable civil works; and
- the works required to construct the converter stations, AC yards and auxiliary facilities.

Figure 2: Major components of Marinus Link



A high level description of the scope is discussed below. For the purpose of this document, landfall HDD will be undertaken by the cable service provider and, therefore, is outside this scope of this document.

1.2.1 Equipment design, supply and commissioning

The equipment design, supply and commissioning scope of work includes the following activities:

- all power system studies and converter station equipment studies to allow for the safe and reliable construction and operation of the converter stations in accordance with the MLPL's requirements;
- all design, manufacturing, procurement, factory testing, supply, transport, installation advice / instruction of supplied equipment, commissioning, defects resolution, interface management, interventions during warranty and associated project commissioning of the converter stations to ensure the safe and reliable operation in accordance with the MLPL's requirements;
- installation of the main converter interface transformers and main converter valves for the converter stations; and
- all activities and provide all equipment required to ensure the satisfactory operation of Marinus Link's symmetrical monopole to achieve compliance with the specified performance requirements, codes and standards.

1.2.2 Interface risks

MLPL's decision to procure three separate work packages was focused on maximising competition tension between prospective service providers for the benefit of electricity consumers. However, the engagement of

three contractors introduces interface risks as the roles and responsibilities for each party (and MLPL) must be clearly defined and integrated. In the absence of effective interface arrangements, the following examples may adversely impact the efficient and timely delivery of the project:

- Some required activities may not be identified and allocated to a specific service provider, creating delivery gaps between service providers;
- A service provider may take decisions that minimises their own costs, but create additional costs or service risks for other service providers (and MLPL); and
- A supplier of one works package could delay or otherwise impact another one or more works packages.

The effective management of interface risks require contractual and governance arrangements to ensure that the service providers work together to deliver the best outcome for customers. In this regard, MLPL has set out its minimum requirements[7] in relation to interface management between Hitachi Energy, the appointed converter station equipment contractor, other appointed contractors and third parties. In accordance with these requirements, Hitachi Energy (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.

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. AEMO's 2024 ISP has assessed the least cost solution as requiring first cable 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

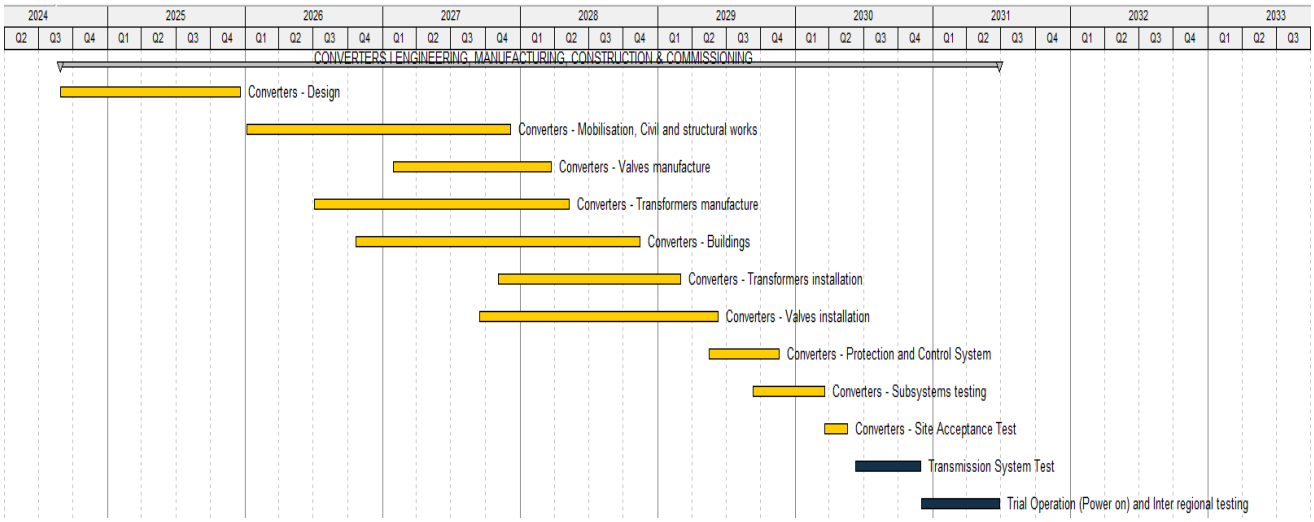
[7] Marinus Link, Interface Management, DAS 4B1, April 2024.

[8] AEM0 2024 Integrated System Plan, Appendix 6. Cost Benefit Analysis, June 2024, page 63.

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. As already noted, the competitive tender process and contract negotiations for the provision of the converter station equipment have been finalised, and the contract with Hitachi Energy has been executed. Converter station design has commenced to enable commencement of commercial operations to start in December 2030, as shown in Figure 3 below.

Figure 3: Timeline for converter stations - from design to project completion



This schedule relies on a set of assumptions about various factors influencing the project's timeline and outcomes. Understanding and managing these assumptions is essential for maintaining the schedule's relevance and effectiveness in the face of real-world uncertainties.

While the provision of converter station equipment is essential to the project, it is the cable manufacturing and submarine cable installation which exposes the project to a greater risk of delay. In order to mitigate this risk, MLPL signed a Capacity Reservation Agreement to secure manufacturing slots and the cable vessel laying window availability with a cable supplier that enables the commencement of commercial operations by December 2030. The decision to sign the Capacity Reservation Agreement is discussed in further detail in Attachment 2, which also forms part of MLPL's revised Revenue Proposal.

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, being the supply and demand conditions for the converter stations, and feedback from prospective service providers. This information 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 converter station equipment;
- Chapter 6 explains the tender evaluation process and outcomes for the converter station equipment; and
- Chapter 7 explains why our proposed expenditure for converter station equipment is prudent and efficient.

2 Forecast expenditure

2.1 Forecasting period

This document addresses MLPL's converter station equipment expenditure, which is construction expenditure rather than early works. The forecasts presented in this attachment includes 'pre-period' converter station equipment 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 converter station equipment expenditure in this attachment and our Revenue Proposal, therefore, will differ slightly from the total costs specified in the contract with Hitachi Energy.

2.2 Summary of forecast expenditure

Table 2 shows the forecast information for converter station equipment design, supply and commissioning. As noted above, this information has been redacted for the purposes of this document.

Table 2: Forecast expenditure for converter station equipment ($m real 2023)[9]

	Pre-period[10]	2025-26	2026-27	2027-28	2028-29	2029-30	Total
Equipment design and supply	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Additional costs (Adjustments)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Total expenditure	**99.7**	**104.2**	**338.9**	**95.6**	**79.5**	**55.3**	**773.2**

The contract price provides for 35 milestone payments that are expected to span 62 months from the date of the first payment to the final payment. The contract price is also subject to adjustments in accordance with indices specified in the contract, which are:

- Copper Index, being the 'Monthly Average Price for Copper' published on the London Metal Exchange website;

[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.

- Transformer commodity index, known as 'GOES – Super High Grade' published on the T&D Europe website;
- Producer price index, being the 'Harmonised Index of Consumer Prices (Producer prices in industry, total - monthly data)' for Germany published on the Eurostat website;
- Hot Steel Index, published on the T&D Europe website;
- Labour index, being the Labour Cost index for Germany published on the T&D Europe website;
- Paper Index (special impregnant type), published on the T&D Europe website; and

The forecast expenditure in Table 2 shows our best estimate of the adjustment, which reflects our forecast of the price indices in accordance with the formulae specified in the contract.

A separate risk allowance has been estimated to account for the additional costs that MLPL expects to pay in accordance with the contract terms as a result of delay, disruption and variations as defined in the contract as 'compensation events'. The applicable rates in relation to the compensation payments that are specified in the contract include:

- Personnel rates for project management, engineering (specialism) and administration;
- Mobilisation and demobilisation rates, standby rates and work rates for each of the crews, being:
  - Testing and commissioning crew;
  - Installation supervision crew;
  - Interface transformer installation crew; and
  - HVDC valve installation crew.
- Temporary storage of equipment at the contractor's relevant manufacturing facility and subsequent late delivery; and
- Rate for additional control and protection factory system testing.

Further details regarding the risk allowance are provided in Attachment 7 to this revised Revenue Proposal.

For the reasons set out in this document and the related supporting information that accompanies our revised Revenue Proposal, MLPL considers that the forecast expenditure for the converter station equipment scope of work is prudent and efficient. As explained in the remainder of this attachment, it reflects 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. As already noted, the AER's Initial Draft Decision approved MLPL's forecast expenditure for converter station equipment as presented in our Revenue Proposal, which was submitted in November 2025. As the forecasts presented in this revised Revenue Proposal have only been updated to reflect minor contract variations and changes in exchange rates and prices indices, MLPL expects the AER to confirm that the revised forecasts are prudent and efficient.

3 Market review and implications

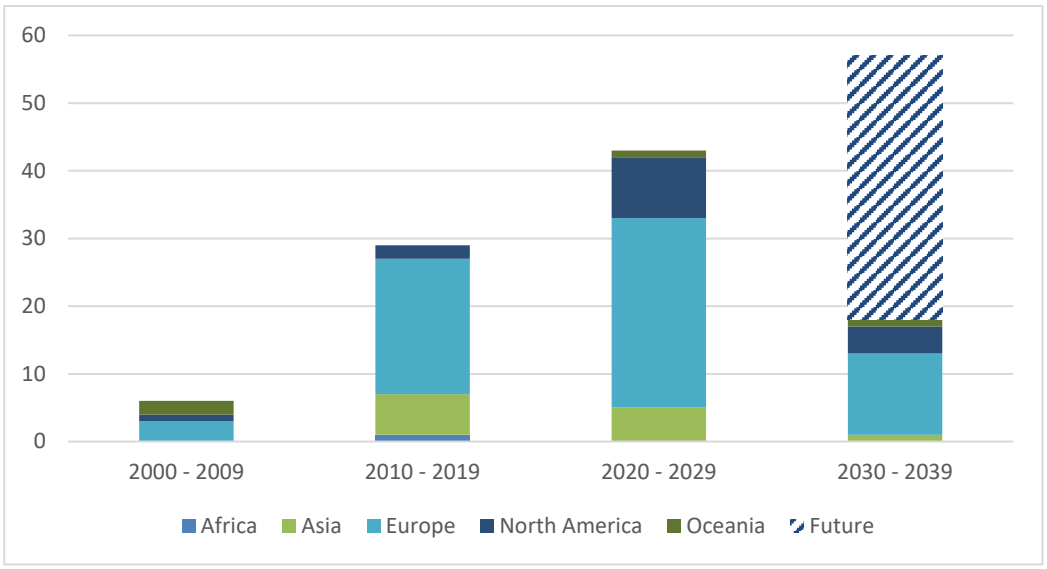
3.1 International supply and demand

In order to develop a procurement approach that delivers the best outcome for electricity consumers, it is essential to first understand the supply and demand conditions for interconnector assets, and the component elements.

The war in Ukraine and increasing instability in the Middle East have led many countries to re-examine their energy supply security, leading to unprecedented demand for HVDC interconnector capacity including offshore wind connectors (and therefore converter stations). On the supply side, the specialist nature of the services and the long-lead time in manufacturing means that it is inherently inelastic, i.e. relatively unresponsive to price changes. The high inflation environment internationally has created additional risks, making it more challenging to secure contractors on favourable terms. Changes in the supply chain and logistics, particularly constraints in using the Suez Canal route, also impact shipping costs and delivery timeframes.

In relation to the design and construction of converter stations, Figure 4 shows the substantial increase in the actual and forecast total number of projects since 2000. These projects are predominantly located in Europe and North America, which together account for approximately 85% of the global demand over the 2020-2029 period.

Figure 4: Actual and forecast number of converter station projects globally



The dominance of the European and North American markets for HVDC converter station design and construction projects (on-shore and off-shore) creates an additional challenge for Marinus Link. In particular, it means that:

- The small number of international suppliers with the necessary skills and experience to meet MLPL's requirements will, at best, only have limited experience of operating in the Asia Pacific region;
- Marinus Link is located remotely from their manufacturing bases, headquarters and engineering offices, creating logistical challenges for prospective service providers; and
- Prospective service providers are less likely to have relationships with local contractors, which introduces additional risks and uncertainties compared to competing projects located in more familiar markets and often in close proximity to the supply and engineering centres.

Each of these observations indicate that the procurement approach needed to consider how best to maximise the number of prospective service providers that could compete for each work package, while also having regard to the impact on interface risks and costs as the number of work packages increase.

3.2 Market soundings

In addition to understanding the international supply and demand 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. By taking 'market soundings', MLPL has been able to determine how best to encourage effective competition between service providers by considering the following matters:

- How works should be packaged?
- How should interface risks be managed?
- Should the procurement process be two or three stages?
- What is the optimal number of competitors in a tender process?
- Should tenderer's costs be reimbursed?
- Which contractual model should be proposed?
- Should traditional procurement arrangements be relaxed to attract more bidders?
- What incentive arrangements should be proposed in the contract terms and conditions?

MLPL engaged extensively with prospective service providers through market sounding to optimise its approach to delivering the converter stations. MLPL continued to refine its approach during the project as further information has become available, with the objective of driving the best outcome for consumers.

In a number of instances, the market soundings reinforced our observations in the supply and demand analysis discussed in section 3.1 above. In particular, the scope of work for converter station equipment is more specialised than the construction of the converter station buildings and associated civil works, where supply and demand balance tends to be more favourable. Furthermore, given Marinus Link's requirement for Voltage Sourced Converter (**VSC**) technology for the converter station equipment, there is a limited number of international suppliers that are meet MLPL's service requirements.

3.3 Implications for MLPL's procurement strategy

The analysis presented in the previous two sections has implications for MLPL's procurement strategy to deliver the Marinus Link as prudently and efficiently as possible. In particular, in order to attract well-qualified tenderers and create competitive tension between them, the market analysis and soundings indicated that MLPL should:

- Ensure that Marinus 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 in the pre-qualification process to maximise tendering participation and avoid tendering fatigue;
- Shorten the duration of the tender process, as far as practicable;
- Optimise the number of tenderers at each phase of the procurement process for each work package;
- Ensure that the technical requirements are aligned with the majority of the tenderers' capabilities and expectations, as far as reasonably practicable while maintaining quality and performance objectives;
- Adopt a realistic approach to risk allocations and incentive arrangements, so that tenderers are not required to manage risks that are beyond their control;
- Provide for some reimbursement of tenderer's costs, where appropriate; and
- Maintain a degree of flexibility by continuing to engage with suppliers through further market soundings, as required.

In applying the above approach to the converter station equipment scope, the procurement approach was tailored to address:

- The different technical characteristics of the scope;

- The availability and skills of the prospective service providers;
- The expectations of the prospective service providers, including the preferred contractual model(s); and
- The challenge of ameliorating the market power of prospective service providers, as far as practicable.

Consumer engagement provides a further input to the development of our procurement approach, which is discussed next.

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 strategy. 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 decisions. Nevertheless, MLPL wanted to ensure that a consumer perspective was explicitly factored into our procurement strategy. 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 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. At MLPL's request, a representative from the AER also attended these meetings in an observer role.

Table 3: Meetings attended by the CAP advisor

Date	Topic
June 2023	• CAP Introductory meeting • Tender briefing • Evaluation Panel Meetings
July 2023	• Prequalification Briefing • Evaluation Panel Meetings
August 2023	• Evaluation Panel Meetings • Steering Committee Meeting • CAP Meetings on Information Access • Evaluation Panel Meetings
September 2023	• Steering Committee Meeting
October 2023	• Technical Evaluation • Converter Station Building Works Tender

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 strategy:

- **Local suppliers**. The CAP has encouraged MLPL to consider how international suppliers can work with Australian partners to employ and support local suppliers. The CAP has expressed support for a strong weighting on Australian industry participation.

- **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 has considered the implications of this feedback for its procurement strategy, as follows:

- In relation to local suppliers, there are a small number of international suppliers with the necessary skills and experience to provide the converter station equipment, as explained in sections 3.1 and 3.2. While there is potential to involve local suppliers in the less specialised building and land cable civil works, the number of local service providers with the requisite experience and resourcing capacity is also relatively limited. Nevertheless, a number of prospective service providers have an Australian presence and may seek to subcontract to local suppliers.

- 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 must ensure that the costs of delivering the proposed scope are prudent and efficient. Further details on how the procurement approach for converter stations and land cable civil works (referred to as 'Balance of Works') 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 which is relevant to MLPL's procurement strategy in relation to converter station equipment:

- **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.

- **Technology risk**: The independent procurement advisor expressed the view that MLPL's chosen technology had not yet been proven in practice, which increases the risk that some aspects of MLPL's service requirements may not be achieved.

- **Costing of risks**: The independent procurement advisor observed that risks associated with departures from the commercial terms have not yet been fully costed. The advisor noted that all risks need to be assessed and costed in order to establish the total costs, prior to awarding contracts.

- **Payment milestone**s: 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 strategy to the converter station equipment, 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 activities required to deliver the converter station equipment. Before setting out our tender design and approach for converter station equipment, 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 converter station equipment has been informed by our understanding of the scope of work; our market analysis, including market soundings and the feedback from our consumer engagement. As explained in our procurement policy, our key objective is to deliver 'value for money', which is equivalent to the regulatory requirement that expenditure must be prudent and efficient.

The key matters addressed in the procurement strategy for converter station equipment were:

- The optimal approach for packaging the works;
- The preferred contractual model; and
- The arrangements for managing interface risks.

We discuss 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 converter station equipment scope of work. Furthermore, these suppliers have limited involvement in the Asia Pacific region, which requires a procurement strategy that encourages their interest in Marinus Link in order to promote effective competition. The specialist nature of the required scope, together with the limited number of suppliers, supported the separate works package for the converter station equipment.

The procurement for this package of work commenced in early 2023, with tenders submitted in July 2023. MLPL subsequently entered into negotiations with tenderers, which were concluded in Q3 2023. Hitachi Energy were selected as the preferred contractor in April 2024 and the contract was executed on 1 May 2024. Further details regarding these timelines are provided in section 5.3.

The converter station equipment scope of work is one of three packages of work that are subject to separate competitive tender processes. The remaining packages of work are:

- Submarine and land cables, which was awarded to Prysmian Powerlink in August 2024. This scope of work includes:
  - to design, engineer, construct, test and commission the DC cable system (including the cables, cable accessories and fibre optic apparatus);
  - the landfall horizontal directional drilling (HDD) works; and
  - the cable monitoring system.
- Balance of Works, noting that the tender process is expected to be completed in May 2025. This scope of work includes:
  - 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 works and joint bays) and access roads.

MLPL considers that this packaging combination will contribute to the prudent and efficient delivery of the required scope of work by:

- Promoting effective competition between prospective service providers for each work package;
- Driving cost efficiencies through mobilisation synergies during the construction phase; and
- Reducing interface risks by simplifying the contractual relationships, which will contribute to lower total project costs.

5.2.2 Contractual models

For the two 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?

We assessed nine different contractual models for their suitability, given the scope of work and our packaging approach. Of these nine contracting models, we conducted a more detailed review of three models, as being the most suitable for MLPL's particular circumstances:

- **Engineer, Procure, Construct (EPC)**

  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.

- **Design and Construct (D&C)**

  Under this model, a single head contractor is engaged to manage the detailed design and construction of the works.

- **Incentivised Target Cost (ITC)**

  This model includes a combination of fixed price and reimbursable cost items. A target cost is developed based on shared risk allocations between the contractor and client. The target cost will include a lump sum component and reimbursable cost component.

Our assessment of these contractual models is summarised in Table 4 below.

Table 4: Contractual model suitability assessment

Contractual model	Suitability criteria Each criterion can be seen as a 'gate' and is applied from left to right			Comment
	Utility	Compatibility	Appetite	
EPC	✓	✓	✓	MLPL considered that the EPC model would maximise the contractual synergies across packages and ensure contract administration alignment.
D&C	✓	✓	✓	This model was also considered acceptable, but less desirable than the EPC model for the converter station equipment.

Contractual model	Suitability criteria Each criterion can be seen as a 'gate' and is applied from left to right			Comment
	Utility	Compatibility	Appetite	
ITC	✓	✓	✓	MLPL considered that while this model is workable, it may be less acceptable to stakeholders.

Based on the above analysis, MLPL has concluded that an EPC contract form is preferred for converter station equipment scope of work. While the EPC contract form has also been adopted for the cables work package, MLPL will need to consider the appropriate contractual arrangements for the Balance of Works tender, given the particular risks involved and the feedback from prospective service providers.

5.2.3 Interface risk management

As noted in section 1.2.2, 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).

Some examples of the interface risks that arise in relation to the converter station equipment and other work packages are summarised below. In presenting these examples, we refer to the different service provider roles without specifically referring to Hitachi Energy and Prysmian Powerlink, who are the appointed service providers for converter station equipment and cable system scopes of work, respectively.

- **Design**: There is a high degree of technical design interface between the converter station equipment service provider and the Balance of Works service provider. For example, the converter station equipment service provider will develop a concept plan and relevant technical specifications for how the equipment will need to be stored and installed in the converter buildings. The Balance of Works service provider will be required to prepare detailed building designs, both below and above ground, which will be reviewed by MLPL and the station equipment service provider. In terms of the procurement process, therefore, it is important to settle the requirements of the converter station equipment requirements prior to contracting the Balance of Works service provider.

- **Construction**: During construction, the Balance of Works service provider will be required to prepare the converter sites in preparation for receipt of the converter equipment. Responsibility for storage of the converter equipment is typically allocated to the Balance of Works service provider, who will also be responsible for safety management at the site. An interface risk arises where the converter station equipment service provider requires access to parts of the converter station site, including during

installation of the HVDC valves and the transformers, and during site testing, pre-commissioning and inspections as well as installation checks of the converter equipment.

- **Connection**: The pulling of the cables into the converter stations will be undertaken by the cable service provider. Particularly, at that stage of the project, the cable service provider, the converter station equipment service provider and the Balance of Works service provider will need to work closely together. The responsibilities and liabilities of each service provider will need to be defined to ensure that this work is coordinated and managed appropriately.

- **Station equipment performance**: The converter station equipment service provider will be responsible for the performance of the converter equipment. However, as equipment performance will partly depend on the actions of the Balance of Works service provider, there is an interface risk that needs to be assessed and managed.

- **Land cable civil works**. The technical performance of the cable may be impacted by the construction quality of the civil works. This issue may be addressed by specifying the works packages so that the cable service provider is responsible for the HDD and trenching work in case of the shore crossings on both sides of the Bass Strait. If, however, this solution is not adopted, the interface risks will be managed as follows:

    - The cable service provider will be required to provide design inputs on trench sizing and other detailed specifications relating to the alignment and location of joint or intermediate pits; and

    - The Balance of Works service provider will be responsible for conducting the trenching in accordance with the specifications.

MLPL recognises that these interface risks will need to be managed through a combination of contractual arrangements and active management throughout the project.

5.3 Tender timelines

Table 5 sets out the indicative timelines for executing the procurement strategy described in the previous section. It shows that the tender process for converter station equipment design, supply and commissioning[11] has been completed.

[11] For ease of reference, this scope is shortened in the table to 'converter station equipment'.

Table 5: Indicative timetable for executing the procurement strategy

Activity	Estimated timing (Calendar Year)
Preparation of tender pre-qualification documents for converter station equipment	Q3 2021
Board approval of tender pre-qualification for converter station equipment documentation	Early Q4 2021
Prequalification process for converter station converter station equipment	Late Q4 2021
Steering Committee approval of proposed applicants to participate in the Request for Tender (**RFT**) process	Q4 2021
Prepare RFT documentation for converter station equipment	Q4 2021 to Q4 2022
MLPL Board approval of Tender Readiness Decision Gate	Q3 2022
RFT issued for converter station equipment	Q1 2023
Board and State/Commonwealth approvals of proposed successful tenderers for converter station equipment	Q4 2023
Converter station equipment contracts ready for award	April 2024
Contract signing for converter station equipment	May 2024

Note: Key decision points and approvals are shaded

6 Tender evaluation and expenditure forecasts

6.1 Introduction

As explained in the previous chapter, MLPL's packaging decision is to deliver the converter stations in two packages by appointing:

- A converter station equipment service provider, who is responsible for equipment design, supply and commissioning; and
- A Balance of Works service provider, who is responsible for converter stations design and construction, and land cable civil works.

While the contract negotiations for the converter station equipment have been finalised, the Balance of Works procurement process has only recently commenced. For that reason, this chapter provides details of our evaluation of the tenders submitted for converter station equipment design, supply and commissioning and the resulting expenditure forecasts. However, the Balance of Works forecasts can only be estimated at this stage, as the procurement process is ongoing.

6.2 Converter station equipment 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 an 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 Marinus Link HVDC Converter Station Procurement Plan version 0.4, dated 30 July 2021, a pre-qualification document for converter station equipment scope of work was issued on 6 August 2021, with a closing date of 24 September 2021. The following companies responded to the pre-qualification invitation:

- ABB Power Grids Sweden (subsequently Hitachi Energy);
- GE Grid Solutions Limited;

- NARI Technology Co Ltd;
- Siemens Energy Global GmbH & Co; and
- Toshiba International Corporation Pty Ltd.

Subsequently, three of these companies participated in the Request for Tender (**RFT**) phase of the procurement process, being Hitachi Energy, GE Grid Solutions, and Siemens Energy Global GmbH & Co. MLPL considers that the number of quality of companies entering the RFT process supported a competitive process.

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

- Develop the RFT documents, in conjunction with the technical team, legal team and other internal stakeholders;
- Concurrent with the development of the RFT documents, develop the tender criteria for incorporation in the RFT documents, noting that these criteria are fixed throughout the RFT process;
- Obtain CEO approval to issue the RFT documents;
- Securely issue the RFT documents simultaneously using the MLPL Tender Portal;
- Securely respond to any questions during the tender periods, in conjunction with the technical team and other internal stakeholders; and
- Receive and record receipt of tender offers and securely issue them to the evaluation team.

Tender offers were received from GE Grid Solutions and Hitachi. Siemens formally notified MLPL on the 3 March 2023 that they would not be participating further.

On 10 October 2023 (during the negotiation phase of the evaluation), MLPL advised the tenderers that it intended to prioritise the conclusion of stage, with arrangements for the delivery of stage 2 to be progressed later. MLPL also advised tenderers of a change in delivery schedule for stage 1, which meant that the new delivery window for the commencement of transmission system tests would fall between October 2029 and June 2030.

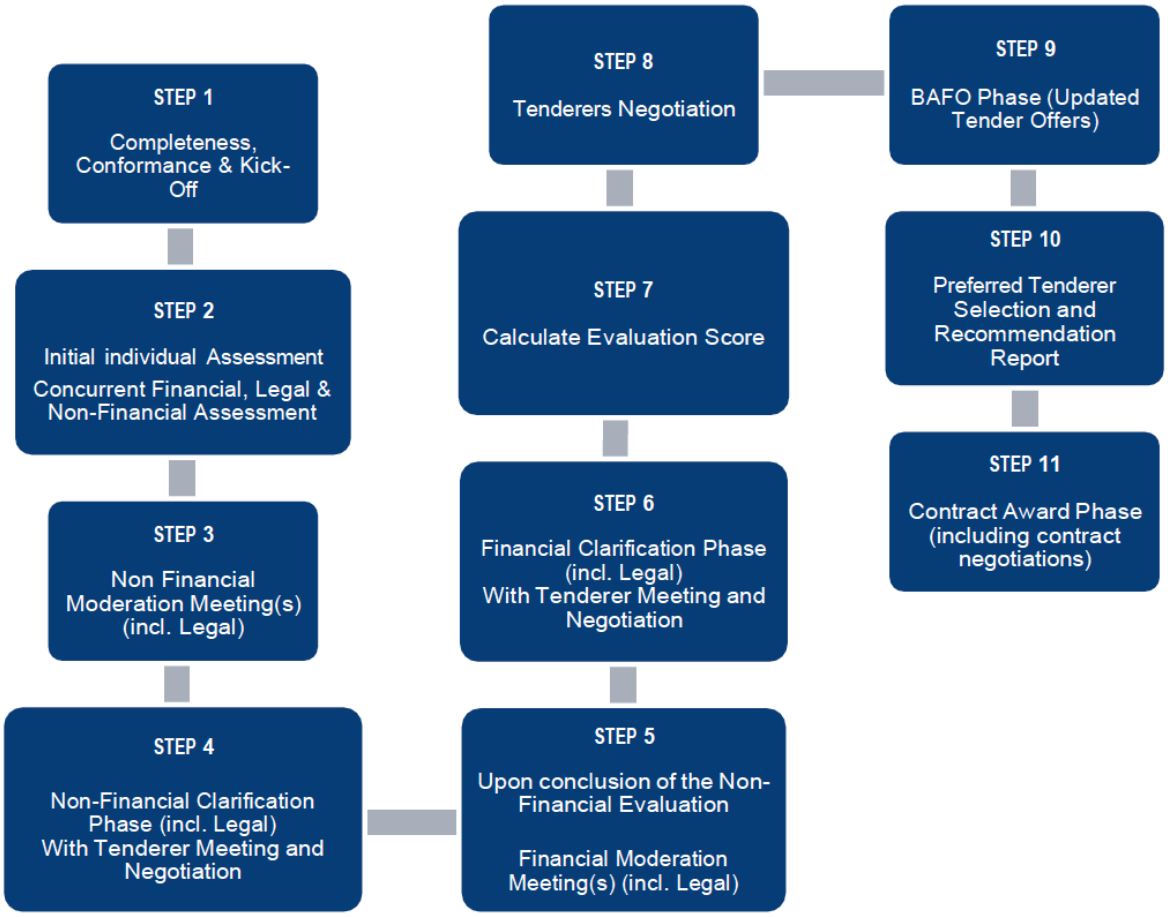
Both tenders updated their tender responses to accept the change in updated delivery schedule and provide updated pricing for stage 1 on a standalone basis. The amended stage 1 scope reflected appropriate engineering and design work for the provision of two converter stations during stage 1 to facilitate a future stage 2. Following an extensive review of the updated tenders and negotiations, the tender evaluation team noted the following points:

- The price for a single stage converter supply from a two-stage converter supply has been analysed and a large proportion of changes are traceable to changes in scope. Tenderers have explained there have been price increases due to tightening market conditions including revision of pricing by their supply chain; and

- Both tenderers have made substantial concessions in their commercial and technical terms through extensive negotiations between late September and December 2023.

The substantial concessions made by bidders were achieved by MLPL conducting an extensive evaluation and negotiation process, comprising 11 steps, as shown in Figure 5 below.

Figure 5: MLPL's tender evaluation and negotiation process



MLPL has fully documented the outcome from the above process in its Final Evaluation and Recommendation Report, which was endorsement by MLPL's Steering Committee in accordance with the Probity and Evaluation Plan. Following the completion of this process, Hitachi Energy was selected as the successful bidder for the converter station equipment design, supply and commissioning scope of work.

Between January and March 2024, Hitachi Energy and MLPL undertook extensive commercial negotiations to achieve contract execution on 1 May 2024.

6.3 Converter station equipment expenditure forecasts

Table 6 below shows the expenditure forecasts for converter station equipment design, supply and commissioning, which is provided to the AER on a confidential basis. The forecasts reflects the expected timing of the milestone payments.

Table 6: Forecast expenditure for converter station equipment ($m real 2023) [12]

	Pre-period[13]	2025-26	2026-27	2027-28	2028-29	2029-30	Total
Equipment design and supply	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Additional costs (Adjustments)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Total expenditure	**99.7**	**104.2**	**338.9**	**95.6**	**79.5**	**55.3**	**773.2**

The contract price is also subject to adjustments in accordance with price 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 6, the contractor is also entitled to compensation payments for interface delays (i.e., a delay caused by another contractor), disruptions and variations. A separate risk allowance has been calculated to account for the expected compensation payments, as explained in Attachment 7 to this revised Revenue Proposal.

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

[13] This includes MLPL's pre-construction costs, some of 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 required capital expenditure 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 prudency and efficiency can only be demonstrated by testing whether each category of expenditure is prudent and efficient. In relation to the converter stations for example, MLPL considers it appropriate to explain why the AER should be satisfied that the forecast 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 scope of work for converter station equipment 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 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 converter station equipment scope of work, which were obtained through competitive tender processes, reflect prudent and efficient expenditure. As already noted, the AER approved our capital expenditure forecasts for converter station equipment as presented in our Revenue Proposal. MLPL therefore expects the AER to approve the minor updates in this document to address variations and adjustments to account for the latest available information regarding exchange rates and price indices.