Transgrid

People. Power. Possibilities.

Procurement & Contracting Strategy

Conductor & OPGW

For Approval

Contents

1. Executive Summary

This procurement strategy for Aluminium Conductor Steel Reinforced (ACSR) ('**Conductor**") and Optical Power Ground Wire ("**OPGW**") makes the following recommendations to maximise value to Transgrid while minimising risk in schedule and supply:

- **Single phase market engagement** with initial focus on securing HumeLink commitments
- **Strategic alignment and management** of one (1) preferred supplier (if practical) for both Conductor and OPGW
- **Transgrid procure and free-issue** Conductor and OPGW (assuming the awarded supplier can supply both) on Incoterm FCA Suppliers Premises (with options and costings for delivery to [redacted] or local storage)
- **Programme approach** to capture Major Projects requirements over next 5 years,
- **Holistic view of Transgrid's requirements** to include for and add value to the Network and Lumea requirements
- **Use of standard equipment specifications** to remove variability of Conductor and OPGW
- **Well-structured contract document** addressing key risks and mitigation, including detailed Contract Management Plan and framework.

Consideration shall be given to award the OPGW to the same supplier as Conductor where practical but as the value benefits for OPGW are minimal in comparison, the main focus should remain on maximising value on the Conductor.

This approach has been selected based on a combination of factors, including recent market feedback from key suppliers, required production and delivery timeframes and logistic considerations to deliver the major projects programme and Network/RP3 requirements while minimising risks and maximising value for money. Key reasoning for this recommendation is:

- Transgrid allocation during manufacturing timeframes represents ~20-25% of each major manufacturer capacity per month indicating opportunity to upscale if required
- Award to a single supplier does not introduce additional schedule risk as major manufacturers have ability to allocate more production capacity during the manufacturing timeframe to shorten overall lead times or accommodate multiple project requirements, along with additional factories available as either a back-up or additional capacity
- No introduced risks with Design and Construct (D&C) contractors on each project:
    - Transgrid can award and schedule deliveries to Transgrid's nominated storage location in advance of project schedule to mitigate potential schedule impact
    - D&C contractors collect Conductor drums from Transgrid's storage location to transport to their required locations along with transmission
    - Only interface is at point of transfer from Transgrid to D&C contractor

- Transgrid to conduct quality control actions at factory and at point of acceptance of stock locally

- Transgrid ability to control Conductor and equipment installed across transmission network
- Staggered deliveries required to manage human, equipment and logistics resources during the delivery schedule
- Transgrid have identified logistics providers who have relevant experience with freight forwarding requirements for conductor as an effective alternative to supplier managed freight
- Strategic advantage for Transgrid having an approved supplier for Conductor which can remove future tendering requirements, reduce overall lead times and a clear costing structure to base future proposals
- Relationship can be extended to Lumea projects as a benefit to expediting project schedules and greater certainty around costs

2. Overview and Context

Over the next seven (7) years, Transgrid is expected to deliver up to $8bn of capital works across its portfolio of Class A, B and C projects:

- HumeLink ($3.2bn)
- Sydney Ring – Northern Section ($0.8bn)
- VNI-West ($2.1bn), possibly including the Victorian section
- Regulatory Works ($1.0bn)
- Lumea Projects (depending on success in contestable market)

As part of the portfolio of works for the Class A projects, there is a significant requirement for Aluminium Conductor Steel Reinforced (ACSR) ('**Conductor**") and Optical Power Ground Wire ("**OPGW**") with these items considered commodity items and standard in specification.

Currently, for Transgrid's scope of prospective Class A projects, initial programme requirements indicate approximately [redacted] of OPGW as outlined below:

HV Equipment Type	Description	Indicative Quantity **	Project	Delivery Location(s)	Earliest Delivery Date (on site)	Latest Delivery Date (on site)	Latest Supply Contract Award Date (by Supplier)
Conductor	ACSR/GZ Orange	[redacted]	Sydney Ring	Eraring, NSW	September 2025	TBC	
			HumeLink	Southern NSW	-	Q2 2025	
			VNI-West	Deniliquin, NSW or nearby	Jan 2026	Jan 2028	
Conductor	ACSR/GZ Lemon		Sydney Ring	Bayswater, NSW	September 2025	TBC	
			HumeLink	Southern NSW	-	Q2 2025	
			VNI-West	Deniliquin, NSW or nearby	Jan 2026	Jan 2028	
Conductor	ACSR/GZ Mango		Upgrade Works	To be confirmed	Q2 2024	Q2 2028	
Conductor	ACSR/GZ Olive		Sydney Ring	Bayswater, NSW	September 2025	TBC	
			VNI-West	Victoria	Jan 2026	Jan 2028	
OPGW (earthwire & comms)	96 Core		HumeLink	Southern NSW	-	Q2 2025	
			VNI-West	Deniliquin, NSW or nearby	Jan 2026	Jan 2028	

In addition to the above volumes, Transgrid may have the opportunity to procure further Conductor for the Victorian side of the VNI West project:

HV Equipment Type	Description	Quantity	Project	Delivery Location
Conductor	ACSR/GZ Olive	[redacted]	KerangLink	Kerang, Victoria

Since more detailed planning information is not yet available for the Victorian requirements, any references to benefits, spend, commitments and timeframes - unless specifically referenced – does not yet include this Conductor.

Traditionally, Conductor and OPGW have been procured project-by-project at the project level by the design and construct contractors (exception smaller upgrade and maintenance projects). This approach worked well for Transgrid in the past during times of stable and steady demand and comparatively high demand power over the supply market.

Procurement of Conductor for Transgrid and the T&D industry overall has evolved due to several potent disruptors:

- The COVID19 pandemic, which impacted global manufacturing capacities, commodity pricing and global shipping and logistics
- Changes in the geopolitical landscape, in particular surrounding armed conflict in Eastern Europe
- A local (and global) shift in demand for specialist transmission equipment, due to the aspiration to develop green carbon neutral power sources and supply in Western nations
- Similarly, for Transgrid a portfolio of greenfield transmission distribution projects which will double the asset base in the network within the next 5 years.

The impacts of these changes are availability and lead time constraints in global markets, general supply market driven price increases, uncertainty of commodity pricing and, more generally, the need to move away from “Just in Time” procurement to a more conservative supply chain position. This Procurement Strategy has been developed to meet the needs of a portfolio approach within the business and Supply Chain has resourced up to be able to procure, secure and contract manage at the portfolio level for each of the Major Projects, working collaboratively and side-by-side with the project teams. Greater control over the

procurement of LLE items like conductor allows Transgrid to de-risk these supply chain elements. It also provides Transgrid with earlier decision-making capabilities to secure contracts and the associated funding requirements (before projects reach regulatory and underwriting milestones associated with head contracting activities).

In addition to Class A Projects, Transgrid has a requirement to adhere to Regulatory Period 3 (RP3) upgrade and maintenance activities along with the potential of further Lumea projects. RP3 forecast demands are included in the table above.

A recent market expression of interest confirmed major suppliers currently have capacity to deliver the required quantities of Conductor and OPGW (for the HumeLink project) within required timeframes, with options available to Transgrid to consider multiple suppliers and factories. Noting though pricing is closely linked with the market rate of aluminium, there is potential given the current global demand and general logistics related cost increases in the extended supply chain, that price increases may be evident over the coming financial year. Forward ordering should be considered as early as possible to mitigate factory capacity limitations as other countries commence their own procurement processes and place high volume forward orders. Recent discussions with the market also indicate that forward order books are filling due to "phantom order" (e.g., for Transformers and items like inverters) to manage uncertain activities like rebuilding the Ukraine's energy system once the Russian conflict cedes.

A medium/long-term strategic approach to current and future Conductor and OPGW requirements is required to ensure equipment availability to meet Class A, B & C Project schedule requirements and long-term program approach in a highly contested industry experiencing major growth and uncertainty.

Transgrid will leverage this PTT Program tender to obtain best in class Australian market pricing for a range of conductors/cables. This will include

(a) negotiating lead time / service level certainty to enable informed decisions on project and program acceleration
(b) Obtaining the broadest possible menu of products leveraged across PTT program pricing and accessible to all Transgrid Business Units (but within our probity obligations).

3. Sourcing Strategy

3.1. Sourcing Timeframe

Current scheduling requires the Conductor and OPGW to be on site Q2 2025 for HumeLink with other projects not yet adequately scheduled to confirm date requirements.

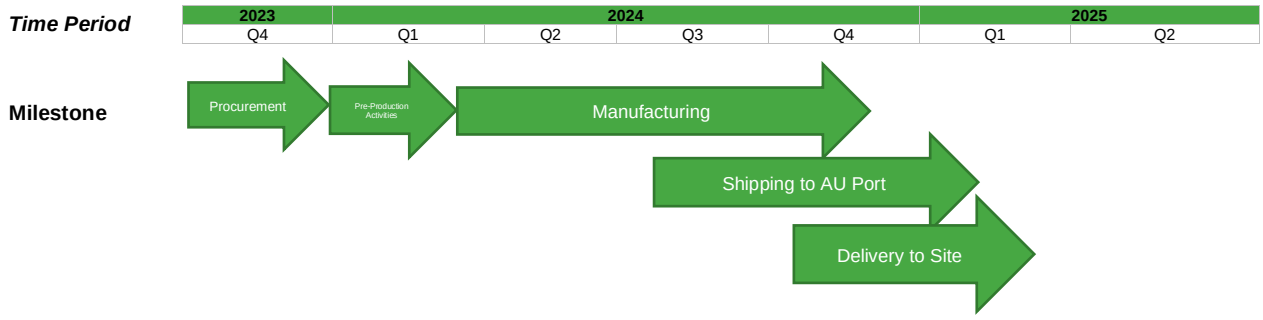
Responses from the market Expression of Interest (EOI) confirmed that subject to factory capacity, production of Conductor and OPGW can usually commence within 2-3 months from placement of an order and depending on which supplier is chosen, factory output is limited to between [redacted] per month for Conductor. This would require a staggered delivery period typically between 4-12 months to achieve HumeLink requirements. The major suppliers have sufficient capacity to meet HumeLink requirements from their primary factory but if expedited delivery is required, they also have backup factories or additional production lanes available to support production.

OPGW has similar constraints with general factory output ranging from [redacted] per month resulting in a staggered delivery period typically between 3-9 months to achieve HumeLink requirements.

The initial HumeLink schedule has stringing of Conductor and OPGW currently scheduled to commence in June 2025 meaning procurement activities should commence Q2 2024 and suppliers requiring commitments Q3 2024 based on current ex-works lead times of 2-3 months from award. However, this is using a 'just-in-time' approach to delivery which is not recommended due to risk in schedule delay. Factoring in general global demand for electrical network distribution equipment, earlier engagement with suppliers commencing no later than within the first half of FY23 with a view for short-to-medium term storage upon arrival in Australia is recommended to mitigate any supply or schedule risks.

Supplier feedback confirms the Conductor and OPGW is suitable for outdoor storage without additional packaging, preparation or cost required. This supports the early procurement of Conductor and OPGW in advance of required on site dates to mitigate any schedule risk.

A high-level outline of timeframes considering staggered delivery is outlined below with a more detailed schedule in Appendix A.



Using a conservative manufacturing volume of [redacted] er month of conductor and based on a staggered delivery requirement, the last date that orders can be placed to meet each project timelines is:

Project	Manufacturing Timeframe	Required On-Site Date (just-in-time)	Latest Order Date (just-in-time)	Recommended Order Date (6-month float)
HumeLink	[redacted]	[redacted]		
VNI-West				
Hunter Transmission				
KerangLink				

3.2. Estimated Commitments

The combined forecast spend for Conductor and OPGW over the next [redacted] for all Class Projects - Major Projects and Network/BAU - is estimated to be between [redacted] If Transgrid are requested to supply to KerangLink, this spend forecast increases to [redacted] broken down as:

Type	Project	Description	Indicative Quantity	UoM	Unit Price Range Low ($)	Unit Price Range High ($)	Total Forecast Spend Low ($)	Total Forecast Spend High ($)
CONDUCTOR	HumeLink	ACSR/GZ Orange	[redacted]					
		ACSR/GZ Lemon						
	Hunter Transmission	ACSR/GZ Orange						
		ACSR/GZ Lemon						
		ACSR/GZ Olive						
	VNI-West	ACSR/GZ Orange						
		ACSR/GZ Lemon						
	Network/RP3	ACSR/GZ Mango						
		ESTIMATED TOTAL FORECAST SPEND ($m)					[redacted]	
	KerangLink	ACSR/GZ Olive	[redacted]					
		ESTIMATED TOTAL FORECAST SPEND with KerangLink ($m)					[redacted]	

Type	Project	Description	Indicative Quantity	UoM	Unit Price Range Low ($)	Unit Price Range High ($)	Total Forecast Spend Low ($)	Total Forecast Spend High ($)
OPGW	HumeLink VNI-West	Option-1: Type A 48 Core Option-2: 96 Core	[redacted]					
		ESTIMATED TOTAL FORECAST SPEND ($m)					[redacted]	

Note: this table currently does not include the balance of the Lumea pipeline of work.

KerangLink is included in this table as this presents a significant spend on Conductor in the overall program.

3.2.1. Pricing Considerations

The cost of Conductor is heavily dependent on the cost of aluminium along with exchange rates, depending on location of manufacture. To provide transparency and protection for both parties against market movements, all suppliers in the EOI phase requested the use of a price adjustment formula to capture both positive and negative movements of critical cost inputs.

Suppliers have indicated ability to hedge material pricing upon award and in advance of manufacturing requirements providing certainty to project spend.

3.3. Projected Benefits

Using the anticipated HumeLink quantity o[redacted]of ACSR/GZ Orange[redacted]onductor [redacted] @ 4 conductors/phase (24) x 2 Circuits + 5% contingency), a comparison of forecast expenditure obtained during the Expression of Interest to the HumeLink Delivery Partners is:

Nature of Supply	Potential Supplier	Rate / km	Forecast Cost for 9,080kms	Comparison to HumeLink ECI
Free issue direct from Manufacturer				
Indirect procurement through Humelink delivery partners		[redacted]	[redacted]	

*Further suppliers expressed interest but did not yet provide pricing to Transgrid.

Preliminary comparison of pricing across budgetary supplier pricing – through both the market sounding activity commissioned by Supply Chain as well as the Humelink ECI tendering activities with Delivery Partners under the D&C provisions – confirms there is value in procuring Conductor for the PTT Program, but also into both Humelink work packages.

Under the indirect procurement option through Humelink partners it is currently not clear under which incoterms costings have been provided. At this point we are assuming these prices include delivery to regional NSW as this is the basis of pricing sought by Supply Chain under the direct procurement option (free issue). Should this assumption not be correct, potential PTT benefits are greater than currently documented.

The above table conservatively outlines a likely and direct value benefit of 2% - 6% (though possibly as high as 11%) for Transgrid to procure directly, prior to any tender negotiations on pricing and any risk contingency allowances. [redacted]

Further benefits via direct procurement should still be achievable through volume rebates or upfront discounts on the base price across the program quantities. Some of the benefits may be consumed if there is a need to leverage short-to-medium storage solutions at point of manufacture. [redacted]

The value benefit is centred around the Conductor due to the quantities required, with OPGW providing marginal value. Unless the final supplier selected can supply both Conductor and OPGW, focus should be on achieving the best value proposition for the Conductor with the OPGW awarded separately.

In addition to direct financial benefits, by engaging in a long-term strategic relationship with a preferred supplier, benefits include:

- Preferential customer relationship based on a longer term strategic contract
- Transgrid retain control over selection and quality of materials to be installed across the transmission network
- Reduced lead times through existing standard designs
- Reduced or limited tendering requirements for future identical equipment subject to the supplier continuing to meet agreed KPI's
- Transparency in pricing and cost adjustment formula built into any agreement
- Early identification of supply chain benefits/constraints through structured supplier relationship management reviews
- Early allocation of future production slots with greater flexibility on timing
- Increased guarantees of supply through strategic contractual relationships

3.4. Identified Suppliers

From the Expression of Interest, multiple suppliers were confirmed with capability to supply Conductor and/or OPGW in the quantities required:

Supplier Name	Capability	Factory Location	Capacity	Note
[redacted]				

It is recommended to include all interested suppliers at time of tender release as market conditions and factory capacity are constantly changing. Supply Chain will also invite further suppliers, including an "aggregator" of electrical equipment procurement in Australia.

Also noted is a small manufacturing capacity in Australia to potentially supply a limited quantity of conductor within the required timeframes though further details will be explored during the tender phase.

3.5. Comparison Between Direct Engagement or via Construction Contractor

Advantages and disadvantages of the proposed procurement models is summarised below:

Activity	Advantages	Disadvantages
Transgrid leads procurement activities	• Ability to create a long-term strategic partnership with a Conductor/OPGW supplier • Transgrid retain control over materials installed in the network rather than rely on Contractor selection • Commodity item does not require specialist procurement knowledge • Transgrid should obtain preferential pricing given combined volumes • Remove Construction Contractor margins on procuring on behalf of Transgrid • Transgrid can 'time' purchase based on forecast raw material price movements • Managed lead times through supplier relationship management activities	• Resources required to coordinate procurement and international logistics • Transgrid accept greater risk in project schedule if delays in delivery • Reliant on a single supplier for current and future requirements

Construction Contractor leads procurement activities	• Transgrid manage Construction Contractor only • Reduced supply and schedule risk as the responsibility of the Contractor • Construction Contractor manages all logistics through to site	• Transgrid lose ability for program approach and maximum value proposition • Focus is project-by-project only and not combined volumes • Transgrid lose control over quality and selection of material installed through transmission network • Higher per km rate likely across future projects • Reduced control over quality • Margin paid to Construction Contractor to manage procurement activities

The recommendation is for Transgrid to lead the procurement activity of Conductor and OPGW. Free issue is considered the most viable option; however, logistics and staging requirements must be coordinated between Supply Chain, Major Projects and Delivery Partners with a clear hand-over point.

3.6. Logistics, Storage and Staging Considerations

The EOI responses provided an indicative drum schedule and for HumeLink quantities of Conductor, the indicated quantities require betweer drums are required. This equates to between depending on the drum configuration and sizing used. This is a significant movement of containers and cost which will need to be factored into the evaluation.

Key to the success of Transgrid procuring the Conductor and OPGW is logistics. The ocean freight is considered relatively standard but the challenge presents in the domestic freight to ensure the required quantities of drums are delivered to the correct locations along the transmission line workfronts. To compensate.

From this location, Transgrid can free-issue to the respective Construction Contractor to coordinate and manage the domestic freight through to their laydown yards or location along the transmission lines as applicable.

For this reasoning, it is recommended that Transgrid procure the Conductor and OPGW on Incoterm Free Carrier (FCA) Suppliers Premises. This will provide a base price for the Conductor and OPGW with the freight portion provisional, recognising firm freight costs cannot be established at time of award. [redacted] Closer to the anticipated shipping period, Transgrid can conduct a review of organising own shipping versus supplier shipping to determine best value and management to Transgrid.

Under the Construction Contracts, a clear point of transfer of risk will need to align with the above approach to minimise Transgrid's exposure to any associated costs or equipment integrity and security.

3.7. Installation Considerations

Installation and line-stringing is to remain with the appointed Delivery Partner(s) for each project and is excluded from the OEM scope of supply. This will remain a supply only contract with the Conductor/OPGW OEM.

Following implementation of the Conductor Frame Agreements, project orders will require careful collaboration with the project team (customer) as well as ECI Delivery Partners. Orders will be placed, for each project, on the basis of:

- Confirmation of
  - Conductor volume
  - Conductor type
  - Drum sizes and configuration requirements
  - Earliest delivery date to storage facility (earliest date to schedule pickup of stock)
  - Conductor and OPGW consumption profile (to guide delivery sizes and volumes)
  - Any other technical requirements for consideration prior to raising an order

3.8. Projected Commitments – Major Projects

3.8.1. Project Funding

The Conductor requirements were included as part of the $385M Re-Wiring the Nation Underwriting recently executed with the Commonwealth and enables Transgrid to purchase and commit to Long Lead Equipment immediately compared to CPA funds being limited and subject to AER approval. With the option to secure firm pricing for key raw materials and store the final product at [redacted] this approach mitigates delay and price escalation risk of supply.

3.8.2. Commitment Forecast

With a staggered programme of projects and using the high pricing point for Conductor, the projected commitments for the Major Projects programme are graphically outlined:

3.9. Procurement Objectives

Beyond the initial commitment to the HumeLink equipment, the market engagement is designed to provide longer term benefits to Transgrid across the multiple business requirements. The main objectives of the market engagement for Conductor and OPGW are the following:

- Select a maximum of 2 suppliers for a 5-year supply agreement to cover the Major Projects and Network/RP3 Program for Conductor and OPGW ensuring that technical outcomes are achieved within the overall project timeframes and budget – objective is to ensure timely access and delivery of Conductor whilst also capturing a best value for money outcome which does not expose Transgrid to increased supply risk.
- Commercial structure that allows for efficient ordering of future requirements, aligned to the organisation's internal and external funding approval processes and a clearly identified partnering approach;
- Identify procurement risks (technical and commercial) and develop mitigation strategies for each of the risks identified; and
- Ensure a fair and competitive process is followed to maximise the value for money; ensure commitment to supply chains which are free of modern slavery; and consider local opportunities

In addition, the following sourcing objectives also need to be considered as part of the proposed sourcing strategy:

Category	Objective	Alignment with Benefits
Technical objectives	1. Maximise use of a standardised specification for the Conductors and OPGW	• Standard equipment across network; • Commonality and reduced spares holdings
Programme objectives	1. 1x Supplier for Conductor 2. 1x Supplier for OPGW 3. Supplier Relationship Management (SRM) plan for ongoing supplier relationship management 4. Contract Management Plan for Supply Agreement – with TG contract manager	• Multi-year contract period to provide assurance and stability to both Transgrid and Supplier • Enable shortest delivery by approval of Conductor and OPGW ahead of projects • Regular forecast / demand planning reviews (quarterly rolling forecast) • Performance monitoring • Value-add initiatives
Commercial objectives	1. Clearly articulated pricing, discounting, and price escalation schedules 2. Identified volume benefits across current / future requirements (sliding scale, rebates or other) 3. Open-book approach to ocean freight 4. Delivery schedules aligned with project requirements	• Competitive pricing achieved through volume discounts • Base price with rise & fall calculations based on clear market indices / metrics • Payment schedule linked to clear, tangible milestones that do not over-commit Transgrid • Clear cancellation schedule aligned with current funding and limiting Transgrid's exposure • Transparency of costs in a volatile logistics market

3.10. Negotiation Plan

To address the identified risks, achieve the procurement objectives and maximise value to Transgrid, a negotiation plan will be established prior to Supplier discussions to provide a roadmap of potential discussion points. The focus of the negotiation plan will be to:

- Establish Transgrid's priorities in advance of entering the negotiations
- Set a structure and process for negotiation
- Assign roles and responsibilities for negotiation
- Develop needs analysis for parties in negotiation
- Develop negotiation strategy

4. Procurement Risks and Mitigation

The procurement strategy needs to address the following identified risks:

Risk Category	Risk	Risk Description	Risk Level	Mitigation
Technical	Standard Specification	Standardised technical specification may not suit all applications and designs	Low	• Design dictated by Australian Standards
	Specification Changes	Risk of spec changes during/after RFT.	Low	• Close interaction between Transgrid's and suppliers' technical and planning teams to ensure that spec changes are agreed timely.
Commercial	Award Schedule	Inability to meet award schedule, particularly for HumeLink, may delay overall project schedules	Low	• Early tender process in advance of schedule • Regular progress updates & information sharing to prepare business for evaluation and award process • Ongoing Supplier Relationship Management (SRM) to manage future requirements
	Single Supplier	Single supplier may potentially reduce capacity to deliver against current and future requirements	Low	• Selection of suppliers with suitable capacity and backup factories available • Ongoing Supplier Relationship Management (SRM) for continued updates on market conditions and factory loadings • Ongoing Transgrid demand planning visibility • Project scheduling to allow for manufacturing time

Risk Category	Risk	Risk Description	Risk Level	Mitigation
		Poor performance may result in having to pursue alternate suppliers for future project requirements	Low	• Conductors considered a commodity item • Selection of suppliers with suitable capacity and backup factories available • Detailed Contract Management Plan • Specific management during project delivery to ensure Supplier deliverables adhered to • Key Performance Indicators aligned with program requirements
		Longer term commitment may lose competitive tension for future requirements	Low	• Selection of supplier with a transparent price structure • Base price and rise/fall mechanism needs to be well structured and transparent
	Supply Chain	Volatile supply chain results in cost uncertainty	Med	• Supplier hedging of raw material pricing • Well-structured rise/fall mechanism applicable to future commitments • Require an open-book approach to costs of ocean and inland freight • TG to retain option to manage freight & logistics if believed can obtain a better value proposition
		Global supply chain volatility impacting raw material lead times	Med	• Early commitment allowing sufficient float in schedule
	Free-issue Equipment	Transgrid take risk in project and equipment schedule	Low	• Management of project and delivery schedules • Transgrid to negotiate liquidated damages to ensure adequate

Risk Category	Risk	Risk Description	Risk Level	Mitigation
				incentive to meet delivery schedule • Storage of cable drums at [redacted] n advance of construction requirements
Funding	Commitment	Insufficient project funds currently approved for full equipment commitments	Med	• Project schedule which allows sufficient time for funding • Clearly articulated price escalation, payment and cancellation schedules required to align with approved funding • No advance commitment to future quantities • PTT program underwritten by Federal Government that includes conductor

5. Commercial Structure

The proposed commercial structure to deliver on a programme approach needs to be flexible to the business needs but also accommodate for the volatility being experienced in the market. The commercial structure recommended requires the following key considerations:

1. Award on a Supply and Deliver basis only
    a. Award on Incoterm Free Carrier (FCA) Suppliers Premises with an option for the Supplier to deliver Delivered At Place (DAP) [redacted]
    b. Separately, Construction Contractors coordinate and assume risk of local freight and logistics fron [redacted] hrough to Site
    c. Construction Contractor retains Conductor and OPGW stringing requirements
2. 5-year contract term
    a. Provides stability to both Transgrid and the Supplier in developing a strategic relationship to deliver against

   b. Award initial HumeLink requirements with future projects committed subject to satisfactory Supplier performance against agreed Key Performance Indicators

3. Award both Conductor and OPGW to a single supplier if possible
   a. Consideration should still be given to suppliers who only manufacture Conductor if the value proposition exists
   b. If not possible, recommend for the Construction Contractors to procure the OPGW as there is little volume benefit across the major projects program to create significant value to Transgrid
4. Payment Milestones and Cancellation Schedules that align with available funding for initial commitments
5. Transgrid free-issue Conductor/OPGW to prime construction contractor
   a. Maintains visibility over Suppliers performance for current project deliverables
   b. Maintains supplier relationship between Transgrid and Supplier
   c. Removes additional margin charged by prime contractor to manage supply agreement
   d. Reduces delay in Conductor/OPGW award as commitments can be placed in advance of construction contractor awarded (for current and future projects)
6. Early notification and commitment of Conductor/OPGW requirements
   a. De-risk supply by early notification of future requirements and timings
   b. Ability to 'time' the market to reduce exposure to raw material price movement
   c. Payment milestones aligned with minimum requirements and exposure
7. Transgrid retain ownership of Supply Contract
   a. TG manage supplier relationship and demand planning for current and future programmes
   b. Potential to secure factory allocation in advance without a Notice to Proceed (NTP)
   c. Cost benefits maximised as no third-party (prime contractor) mark-ups on management of individual supply requirements

To achieve the preferred commercial structure, the table below outlines the expected commercial contract schedules aimed to achieve confidence in reviewing pricing movements, manage cancellation exposure and effectively manage the greater supplier relationship and future requirements of Transgrid projects:

Schedule	Sections	Details
Price Structure	Unit Pricing	Based on standardised technical specification for Conductor/OPGW Clear cost build-up outlined in agreement

		Break-down of current and future quantities per project
	Payment Milestones	Payment milestones based on clear and tangible events during the supply process Limit of front-end outlay and exposure to reduce TG risk
	Price Adjustment Formula	Base pricing linked to independent market indices Clear formula to calculate future price and price adjustment
	Volume based discounts / rebates	Sliding scale based on commitments made during financial year or other agreed time period
	Cancellation schedule	Schedule to aligned with project milestones so cancellation may occur (if required) within approved commitment for equipment type
	Options	Outlines pricing for any optional items (e.g. additional tests, storage)
Delivery Schedule		Outline of known delivery requirements along with indicative future requirements
Approved Factories		List of approved factories
Key Performance Indicators		Clear KPI's to ascertain that supplier is meeting obligations under agreement Will be used to determine suitability of future commitments e.g. ability to hit budgeted base price / lead times / project schedule

Supplier Relationship Management (SRM)		Outline of Management Plan in how to maximise value and minimise risk in the supply of Conductors/OPGW for current and future requirements

6. Form of Contract

An enhanced version of the Supply of Goods and Services as developed with Legal will be the contract document used for the engagement. This document includes for additional clauses required to better manage the schedule, risk exposure and overall relationship and includes for:

- Use of Separable Portions
- Security and performance undertakings
- Greater requirements for insurances
- Suspension of the Works
- Quality Assurance and Transgrid's rights to inspect the Goods during fabrication
- Examination and Testing
- Progress Reports and Meetings

7. Contract Management

A Contract Management Plan will be established to manage and monitor the performance of the selected contractors upon award. This Plan will report and consider performance of the Supplier(s) in meeting the original strategy objectives.

Supply Chain will manage group level contracting arrangements with suppliers, whilst project specific orders will remain the responsibility of the respective Project teams.

Flow-on considerations, for example insurance related provisions, shall be discussed with relevant group and project stakeholders closer to project specific orders being placed (once the requirements have been confirmed). This includes addressing any gaps to enable safe and secure storage provisions even though initial scoping of the site has been carried out as part of the procurement strategy planning process.

8. Ethical, Sustainable and Resilient Procurement

As part of TG controlling direct to manufacturer program contracts, emphasis will be placed on achieving sufficient confidence on the subject of Modern Slavery in the indirect supply chain. In addition, Supply Chain will attempt to maximise local spend opportunities including the provision of indigenous services to support the extended logistics supply chain.

From a sustainability and resilience perspective, should contract awards be reliant on a single supplier further assessment will be undertaken to demonstrate supply chain resilience (including a strong financial standing).

Transgrid will also ascertain carbon footprints from conductor suppliers to help inform the group's objective in relation to carbon emissions footprint and reduction targets. Aluminium is a key carbon emitter due to its energy intensity in manufacturing.

9. Delivery Partner Considerations

Delivery Partners expressed concern over scope removal in previous discussions with the Humelink project team. These discussions have been substantiated to the extent both the will accept the removal of the Conductor procurement scope from the EPC contracts (unlike the Tower procurement scope), but a decision must be made rapidly in order for contractors to finalise and prioritise project development on Humelink.

10. Recommendation

The market engagement considers the global market demand for Conductor and OPGW, potential for extended lead times and raw material price movements. This approach also considers the potential value benefit of Transgrid engaging the suppliers directly along with logistics considerations for a commodity item.

This approach has been selected based on a combination of factors, including recent market feedback from key suppliers, required production and delivery timeframes and logistic considerations to deliver the major projects programme along with identifying benefits for Network and Lumea requirements while minimising risks and maximising value for money.

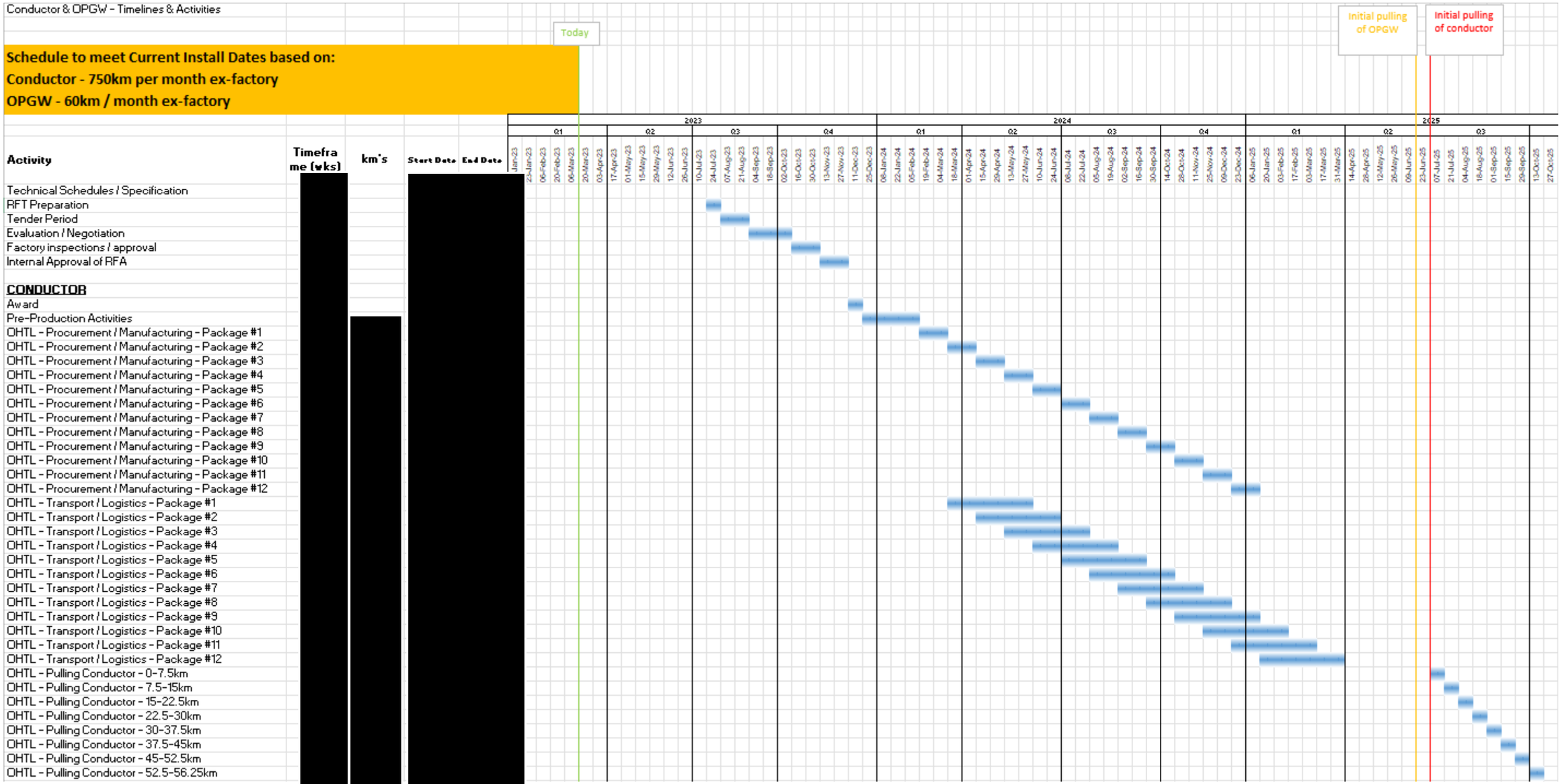
A summary of the recommended procurement approach is provided below:

- **Single phase market engagement** with initial focus on securing HumeLink commitments
- **Strategic alignment and management** of one (1) preferred supplier (if practical) for both Conductor and OPGW
- **Transgrid procure and free-issue** Conductor and OPGW (assuming the awarded supplier can supply both) on Incoterm FCA Suppliers Premises
- **Programme approach** to capture Major Projects requirements over next 5 years,
- [redacted]
- **Use of standard equipment specifications** to remove variability of Conductor and OPGW
- **Well-structured contract document** addressing key risks and mitigation, including detailed Contract Management Plan and framework.

11. Review and Approvals for PTT Program Conductor Procurement

Prepared:	[redacted]	
Reviewed:		
Reviewed:		
Endorsed:		
Endorsed:		
Endorsed:		
Endorsed:		
Endorsed:		
Approved		

Appendix A – Indicative Procurement Schedule (Float Allowance)



Appendix B – [redacted] Storage Option

Potential storage area for conductor:

1. 16,500 m2, ground is clean and firm, ready to use
2. 3,850 m2, small amount of dirt on the ground, need to clean first
3. 1,800 m2, large amount of dirt and concrete material, needs to be removed first
4. 500 m2 beside the large warehouse, bit rugged, needs to be levelled before use
5. 3,000 m2, reserved for helicopter landed
6. 850 m2, small area on the corner, recommended to leave empty for emergency

[redacted]