

The logo for National Grid, featuring the word "national" in a dark blue sans-serif font and "grid" in a bold, dark blue sans-serif font.The logo for Murphy, featuring the word "MURPHY" in a bold, yellow, italicized sans-serif font. Below it, the words "WORLD-CLASS INFRASTRUCTURE" are written in a smaller, yellow, sans-serif font, all contained within a dark green rectangular box.

## Collaboration in NEC4

Eastern Green Link 2

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## Agenda

The logo for National Grid, featuring the word "national" in a dark blue sans-serif font and "grid" in a bold, dark blue sans-serif font.The logo for Eastern Green Link 2, featuring a green circle with a white 'E' and the text "Eastern Green Link 2" in a green sans-serif font.The logo for Murphy, featuring the word "MURPHY" in a bold, yellow, italicized sans-serif font. Below it, the words "WORLD-CLASS INFRASTRUCTURE" are written in a smaller, yellow, sans-serif font, all contained within a dark green rectangular box.

- Collaboration in the NEC4
- Eastern Green Link 2:
  - Project Overview
  - Overcoming adversity
  - Acceleration process
  - Collaborative process
  - Outcomes
  - Further Benefits
  - Lessons Learned
- Conclusion

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## NEC4 Principles of Collaboration

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The Parties, the Project Manager and the Supervisor **shall** act in a spirit of mutual trust and co-operation.

NEC4 Engineering and Construction Contract (Clause 10.2)

- Purpose: Sets a behavioural standard for all parties.
- Collaborative Impact: Encourages openness and shared problem-solving rather than blame.

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## NEC4 Principles of Collaboration

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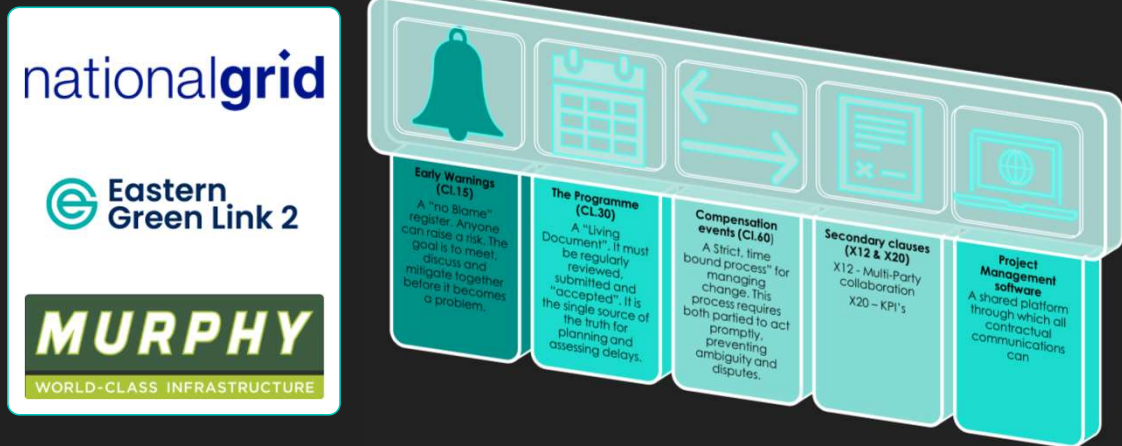
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- NEC4 supports alliances, frameworks, and integrated delivery teams.
- NEC4 contracts encourage proactive communication to enhance collaboration and prevent misunderstandings during projects.
- These models are designed to reduce fragmentation and promote long-term partnerships.
- Transparency: ensures all parties have clear and open communication, fostering trust and reducing disputes.
- Fairness and equality: NEC4 emphasises fairness to ensure balanced risk and benefit sharing among stakeholders

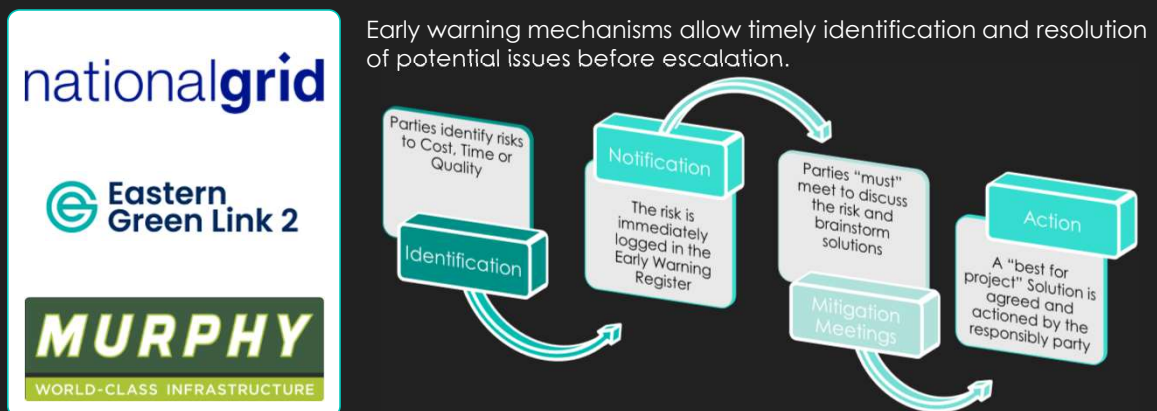
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## Collaboration Mechanisms – Early Warnings



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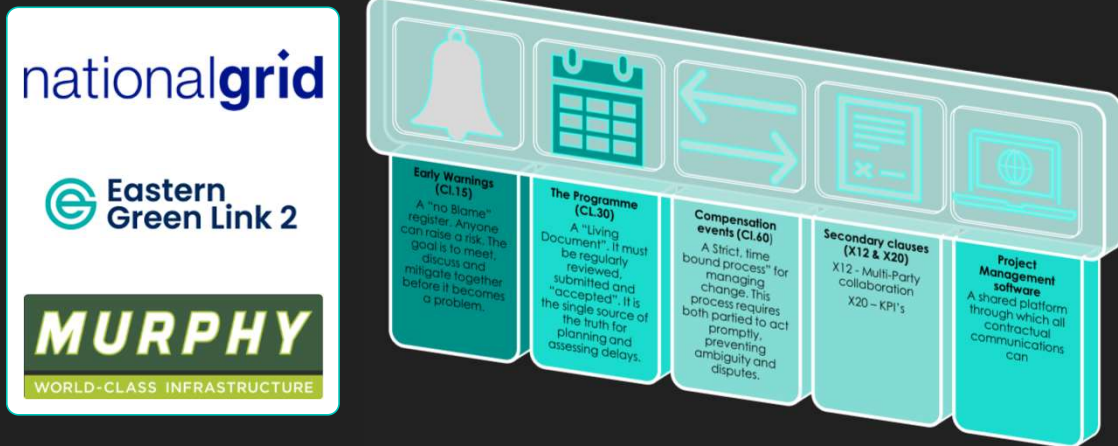
## Collaboration Mechanisms – Early Warnings



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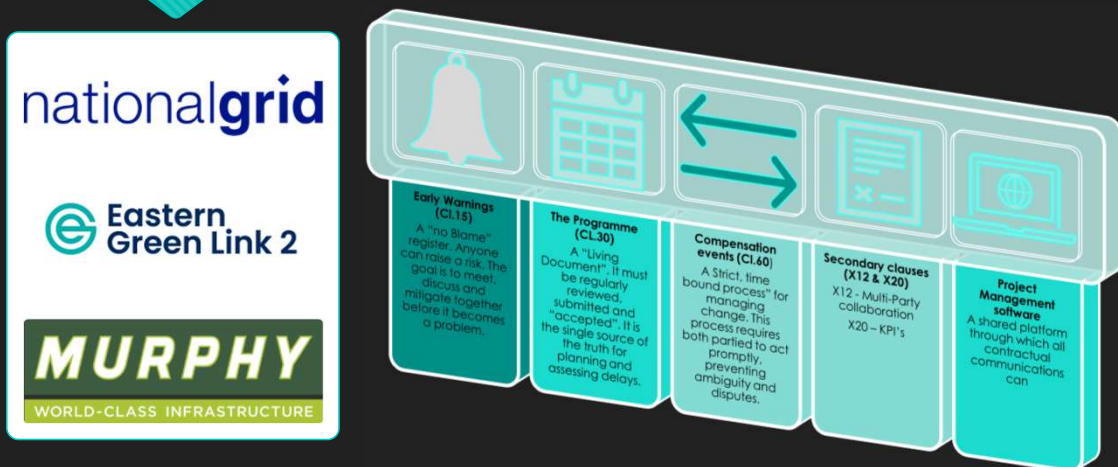


## Collaboration Mechanisms - Programme



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## Collaboration Mechanisms – CE's



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## Collaboration Mechanisms – CE's

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- Compensation events (CEs) in NEC4 contracts are managed collaboratively through a structured, proactive process centred on early communication, joint problem-solving, and strict adherence to defined timelines
- Structured process for handling changes in scope, time, or cost.
- Collaborative Impact: Encourages timely resolution and avoids end-of-project disputes.

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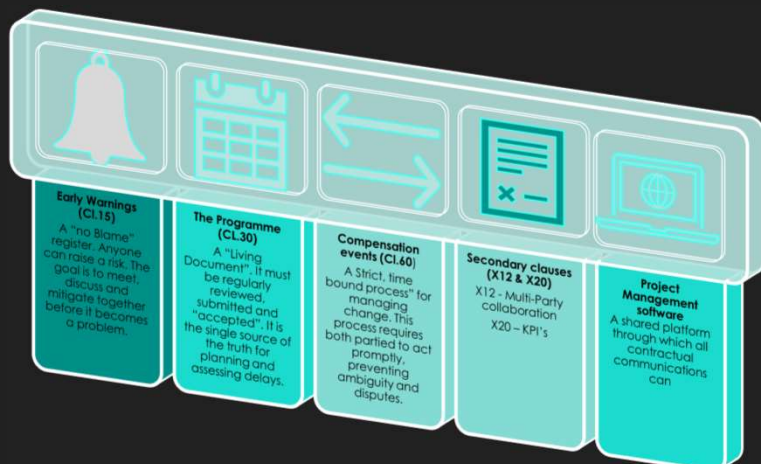
## Collaboration Mechanisms – Secondary Clauses

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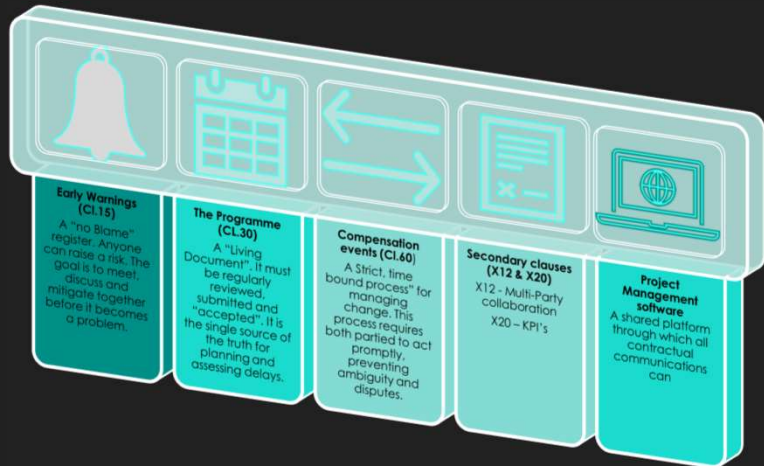
WORLD-CLASS INFRASTRUCTURE



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## Collaboration Mechanisms Shared Project Management Tools



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## Collaboration Mechanisms Shared Project Management Tools



- NEC Software management tool
  - Enabled real-time contract management and communication,
  - reducing delays and
  - improving decision-making.



FastDraft



Contract Bee



RPC



Aconex

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## Benefits of Collaboration

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- Clear roles and responsibilities with structured communication protocols.
- Improved Project Outcomes: Projects are more likely to be delivered on time and within budget when collaboration is genuine.
- Proactive risk management.
- Reduced Disputes: Early warnings and joint risk management reduce the likelihood of costly legal battles.
- Enhanced client confidence and stronger relationships
  - Long-term partnerships and repeat business are more feasible under a collaborative framework.
- Fostering an environment conducive to innovation

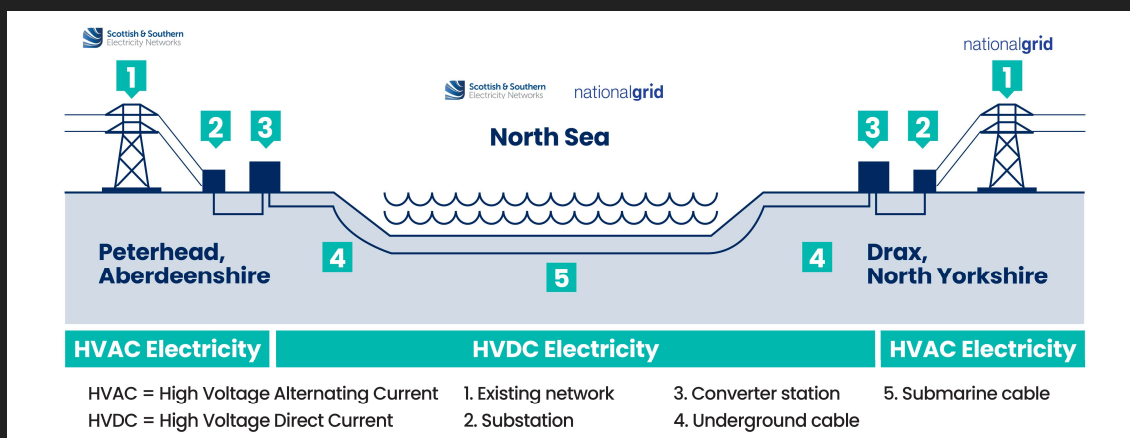
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## Eastern Green Link – Scheme

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## Eastern Green Link 2 – The Contract

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- The RIIIO-T2 (Revenue = Incentives + Innovation + Outputs) framework.
- Eastern Green link was let under this framework on NEC Option A (Priced contract with activity schedule)
  - **Client:** National Grid Electricity Transmission plc (NGET)
  - **Contractor:** Murphy Power Networks Limited (MPN)
- Framework Level Secondary Options: X2, X11, X15, X18, X21 Y(UK)2
- Project Specific Secondary Options: X1, X5, X7, X8, X16, X20
- Sectional Completion Dates:
  - SC1- Thorpe March cable replacement works 4<sup>th</sup> August 2025
  - SC2 - Completion of Bay 6 works 5<sup>th</sup> October 2026

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## Eastern Green Link 2 - Overview

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## Eastern Green Link 2 - Outages



- An NGET outage is a scheduled period during which certain assets (like substations, overhead lines, or transformers) are temporarily taken offline. These outages are essential for:
  - Maintenance and inspections
  - Upgrades or replacements
  - New customer connections
  - System resilience improvements
- Outages are carefully planned to minimize disruption and maintain overall grid stability.
- Outages have to be agreed by National Energy System Operator (NESO)

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## Eastern Green Link 2 – The Issues



- The Contract required NGET to provide an area for the contractor to use as a compound.
- The area proposed in the contract was occupied by another contractor
- Multiple alternatives were assessed, instructed and ultimately fell through.
- The contractor still had no compound area and time was slipping away
- NGET could not lose the opportunity to carry out these works during this outage
- The only option to maintain NGET dates would be for MPN to Accelerate

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## Acceleration – The Process



Step	Clause	Action
1	36.1	PM invites acceleration proposal
2	36.2	Contractor submits quotation
3	36.3	PM accepts and instructs acceleration
4	60.1 (4)	Instruction treated as compensation event
5	61.1	PM notifies compensation event
6	65	Contract updated with new Completion Date and Prices

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## Eastern Green Link 2 - The Art of the Possible



- Sectional Completion 1 – Thorpe Marsh Cable works had slipped to 18<sup>th</sup> April 2026. NGET were negotiating with NESO to try and extend the outage past clock change to 30<sup>th</sup> November 2025.
- Beginning of March – NGET reach out to see what can be done.
- All key stakeholder participated in a workshop.
- Potential options produced an array of “what if” scenario’s
- Potential blockers and solutions / Actions identified
- Hybrid solution found for Contractor's facilities.
- Production of a list of Time related Compensation Events that needed implementing prior to Acceleration

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## Eastern Green Link 2 -Reality Bites



- MPN had provided all options available whilst protecting their exposure to Delay Damages (X7)
- MPN had exhausted options from their supply chain
- The best date MPN could achieve was mid Dec'25
- NESO advised not only could the outage not be extended to end of Nov'25 but they would only authorise 31<sup>st</sup> Oct '25
- The project team needed to accelerate nearly 6 months

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## Eastern Green Link 2 – Out of the Box thinking



- Transparent communication
  - Logic reviews – Programme challenges
  - Working outside contractual timescales (approvals and design solutions)
  - Working in good faith and trust.
- Alignment of goals
  - Remove risk for Contractor
  - Find solution for Client
- Supply chain interventions – Cables decommission and supply.
- Client reallocation of resource from other projects.
- Additional Incentives

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## Eastern Green Link 2 - Collaboration Outcomes

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- Achieved and exceeded return dates (Despite delivery issues), keeping safety at the centre of the decision making.
- Improved relationships and open forum to challenge and holding each other to account.
- All time related Compensation Events agreed and implemented
- DoV to amend Sectional Completion mechanism for Section 1
- Agreed Acceleration costs
- Agreed Best Endeavours Programme
- Continuous improvement
  - Development of weekly and daily lookahead programmes
- Efficient use of early warnings

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## Eastern Green Link 2 - Collaboration Outcomes

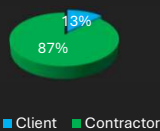
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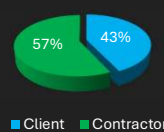
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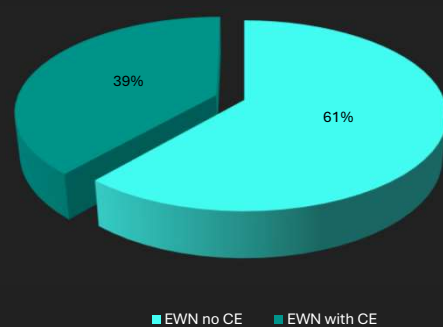
EWN  
Pre-Acceleration



EWN  
Post-Acceleration



EWN – CE conversion



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## Eastern Green Link 2 - Further Benefits



- Early return - secured network for winter, clock change massively increases system load.
- Gives NGET flexibility to reprioritise other schemes
- Allowed NGET to undertake 30 Asset health interventions to further secure and improve the security of the network.
- Follow on activities in future would not need to be rescheduled.

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## Eastern Green Link 2 - Lesson Learned



- Embed collaborative behaviours early in contract
- Use NEC4 Early Warning mechanism as a proactive tool, not a reactive one
- Contract Admin needs to be processed as efficiently as possible.
- Collaboration needs both sides to come to the table and contribute open and honestly.

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## Eastern Green Link 2 - Conclusion

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- NEC4 represents more than a contractual framework; it embodies a collaborative philosophy that underpins effective project delivery. The strength of its collaborative provisions is realised only when all parties demonstrate a genuine commitment to mutual trust, transparency, and proactive engagement. For aspiring project managers, engineers, and commercial professionals, a thorough understanding and adoption of NEC4's collaborative principles will be essential for achieving successful infrastructure outcomes.

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## Any Questions

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