

Date: 25 November 2024

To: distribution network and system operators, flexibility providers, generators and other interested parties

Dear Stakeholders,

Formal Approval of Extension (Derogation) for CIM Implementation into the Long Term Development Statement

The purpose of this open letter is to confirm and formally approve the Distribution Network Operators' (DNOs) request for a one-year extension regarding the implementation of stage 1.3 (contained within Table 7 of the form of Long-Term Development Statement (LTDS)) of the Common Information Model (CIM). This also confirms an extension of the deadlines for subsequent stages 2 & 3, also contained within Table 7 of the form of LTDS, by one year.

The LTDS direction was published in April 2024. At that time, our extensive engagement with industry and software vendors indicated that the deadlines committed were challenging but appropriate and deliverable. Flexibility was built into the LTDS Direction deadlines to ensure any risks to delivery of the LTDS outputs could be mitigated. Ofgem and industry are working closely together to progress implementation of the LTDS reforms, including discussions at an advanced stage with the British Standards Institution (BSI) regarding the interface between existing UK & international governance structures for the CIM and any future group providing governance of GB CIM-based data exchange. However, there have been delays outside of the control of the DNOs, which has led to a request for an extension by DNOs. For further information on this, please see the last two letters attached to this document (request for extension, Appendix 2 and proposed new

¹ Long Term Development Statement direction | Ofgem

timelines, Appendix 3).

The reasons given for the request are:

1. Absence of Formal Governance Mechanisms: The current lack of formal governance mechanisms to address issues relating to CIM adoption for the LTDS.

- 2. Unreadiness of Required Software Tools: The necessary software tools for testing and validation are not yet available from market vendors.
- 3. Technical Challenges: Vendors have raised numerous technical queries and issues regarding the development of LTDS CIM profile extraction capabilities.

We believe that these reasons merit the setting of revised publication dates pursuant to the LTDS Direction. This reflects our consideration that the DNOs appear to be facing genuine obstacles that make timely compliance with the current deadlines impractical. In the LTDS Direction, we stated that DNOs are required to use their best endeavors to meet publication dates and deadlines. However, if a DNO becomes aware that it will not be able to meet a deadline, it is required to notify the Authority in writing as soon as possible, and no later than 28 days before the relevant deadline. We can confirm the DNOs have met this requirement.

To mitigate current challenges, the DNOs have proposed deferring the stage 1.3 milestone dates set out in Table 7 of the form of LTDS (currently 15 October and 30 November 2024) until the prerequisite capabilities associated with network modelling tools and governance capabilities are established. The DNOs have proposed this should be in November 2025, as detailed in Table 1 in Appendix 1 of their extension request letter (attached at Appendix 2 to this letter). Whilst not explicitly stated in the DNOs' letters, the extension to the stage 1.3 milestone will create knock-on extension effects for the stage 2 and 3 milestone dates set out in Table 7 of the form of LTDS.

After careful consideration, we agree that the evidence presented merits an extension to the requested timeline. This evidence includes an absence of formal governance mechanisms, where it was noted that there is no formal governance to resolve issues and update the CIM LTDS standard. Development of these governance routes is ongoing as set out above.

The DNO's evidence also showed that vendor software tools were not yet sufficient for testing and validation, and that there were other technical challenges such as numerous technical queries and issues raised by vendors regarding the development of LTDS CIM profile extraction capabilities. It is important that where a software need or technical

challenge is identified, industry acts suitably and swiftly to address those issues.

We recognise that any delay has an impact on data users, and it is important all companies work swiftly to minimise the impact on those users. We also acknowledge that delays also have an impact on realising the benefits of the new requirements. However, having considered the evidence submitted, our assessment is that this extension best balances the genuine challenges being faced with the timely delivery of the obligations set out in the LTDS Direction.

We can confirm that we are granting this extension, meaning that DNOs will now be required to submit and publish their stage 1.3 deliverables (set out in Table 7 of the form of LTDS) by 28 November 2025. This has knock-on extension effects for the stage 2 and 3 deliverables (set out in Table 7 of the form of LTDS), which have amended publication dates of 29 May 2026 and 30 November 2026 respectively – see Table 1 in Appendix 1 below for more details.

Yours sincerely,

Steve McMahon

Director, Network Price Controls

How we labor

Appendix 1

Table 1: Grid Modelling Data Result Deadlines

Stage	Stage deliverables	Current deadline	New Deadline
Stage 0	A solution design and a plan outlining the solution implementation activities of each Stage	15 March, 2024	Completed
Stage 1			
1.1	An Equipment (EQ) Model representing the existing grid of a single GSP	15 June, 2024	Completed
1.2	Interoperability validation of the GSP EQ Mode	15 July, 2024	Completed
1.3	An Equipment (EQ) Model representing the existing grid of the entire licence area	Production: 15 October, 2024 Publication: 30 November, 2024	Production: 15 October 2025 Publication: 28 November 2025
Stage 2	EQ, Short Circuit (SC) and System Capacity (SYSCAP) Models representing the existing licence area grid and the future grid for each of the next 5 years	Production:15 April 2025 Publication: 30 May, 2025	Production:15 April 2026 Publication: 29 May 2026
Stage 3	Solved cases; Geospatial Location (GL) Models for the existing licence area grid and the future grid for each of the next 5 years; licensee grid development projects as Difference Models	Production: 15 August, 2025 Publication: 30 November, 2025	Production: 15 August, 2026 Publication: 30 November 2026



Liam Bennett
Head of Energy System Digitalisation
Energy Systems Management and Security
Ofgem
10 South Colonnade,
Canary Wharf,
E14 4PU

Sent by email: Liam.Bennett@ofgem.gov.uk

Dear Liam,

Collective DNO position with regard to the Grid Modelling Solution as defined in the Form of the Long-Term Development Statement (LTDS)

On 30 April 2024, Ofgem issued a direction to the Distribution Network Operators (DNOs) in accordance with paragraph 25.2 of Standard Condition 25 of the Electricity Distribution Licence. This letter is in response to recent dialogue the LTDS CIM Working Group Chair has had with Ofgem.

DNOs have been making active progress on developing CIM network models to the CIM LTDS standard defined by Ofgem this year, with vendors of network modelling software used by DNOs also having developed test software to implement the standard. This work has identified problems with the standard, but there is not yet any governance mechanism to resolve these issues. Ofgem's direction letter on 30 April 2024 confirmed the governance of the standard was critical to delivery of the LTDS and that Ofgem would confirm governance arrangements in Q3 2024.

In accordance with paragraph 3 of the direction all fourteen Distribution Network Operators (DNOs) are collectively writing to inform Ofgem that they believe that publication of the Grid Modelling Solution, as set out in the Form of the Long-Term Development Statement (LTDS), by the specified milestones is not achievable and its submission to Ofgem on 15 October 2024 and publication at the end of November 2024 would not provide any value to Ofgem or stakeholders.

During a meeting on 3 September 2024 between Ofgem and the LTDS CIM Working Group Chair the group's concerns regarding their ability to meet milestone 1.3 was discussed. Ofgem verbally indicated that any alterations to the milestone would require sufficient evidence to justify the change, and that Ofgem's preference would be to defer the milestone rather than reducing its scope from publication of an LTDS CIM EQ Profile to publication of a CGMES v3.0 CIM Profile. We believe, therefore, that submission of the LTDS EQ CIM Profile and consequent publication should be deferred and we provide proposed alternative timescales in the appendix to this letter along with our rationale for the deferral. This is primarily owing to there being no governance mechanism to resolve issues and update the Common Information Model (CIM) LTDS standard as defined by Ofgem in the Form of Statement, and the impacts this has on the availability of the CIM LTDS standard in vendor modelling software.

Registered office Energy Networks Association Limited, 4 More London Riverside, London SE1 2AU t. +44 (0)20 7706 5100 e. info@energynetworks.org energynetworks.org



As a result of this deferral the first publication of a CIM LTDS EQ profile alongside the Excel-based version of the LTDS would be in November 2025. DNOs had considered that a CGMES v3.0 CIM file may have been published alongside their November 2024's LTDS publications but based on the verbal guidance provided by Ofgem understand that this is not preferable and DNOs do not plan to publish a CIM file aligned with milestone 1.3 until November 2025.

We have worked collectively to meet these milestones via weekly meetings between the Working Group and technical meetings with power system modelling vendors regarding LTDS CIM extraction capabilities. We have also provided feedback on a vendor proposal for managing governance and have maintained ongoing engagement with Ofgem throughout. The DNOs' rationale for our position can be summarised as follows:

- Vendors have begun to implement the new LTDS CIM standard, as defined by Ofgem, and made it
 available to limited users including DNOs, so that outputs could be developed for test. This version of
 the software does not address all of Ofgem's requirements for the LTDS CIM profile and it is not
 included in network modelling software versions publicly available for 2024;
- Further, the DNOs have received a number of technical queries and issues from software vendors regarding the further development of LTDS CIM profile extraction capabilities;
- There is a lack of any formal GB CIM Governance to resolve these issues and redefine the standard, so resolutions cannot be progressed and there is the potential to result in divergent profile extensions if development is not carefully managed. An enduring governance capability must be developed;
- This CIM governance is on the critical path for vendors to complete the implementation of the standard in their software, test it and release a CIM LTDS extractor to DNOs and users;
- Ofgem has now clarified that industry will need to develop and implement the formal GB CIM
 Governance, the scope of which extends beyond the LTDS to include data exchange for the Grid Code,
 which includes Transmission Owners and System Operators as well as the DNOs (this clarification
 came in an email on 13 August 2024 from Liam Bennett to the LTDS CIM working group, which
 referenced TOs and ESO requirements, and stated the governance should "cease to be a regulatory
 responsibility and instead sit with industry"):
- Publishing an LTDS CIM EQ profile without successful interoperability and conformity tests will hinder network validation and user interoperability; and
- Customer perspective: Users cannot properly import the information contained within the LTDS CIM EQ
 Profile without the official integration of a CIM LTDS importer into their vendor systems. i.e. extractors
 to the CIM LTDS standard are not yet available to public users of the software; there is no value in
 publishing a file that users cannot read.

To mitigate this, the DNOs propose that the stage 1.3 milestone dates (15 October and 30 November 2024) be deferred until the prerequisite capabilities associated with network modelling tools and governance capabilities can be established. We believe this needs to be in November 2025 as detailed in Table 1 in Appendix 1.

The DNOs recognise the value that data exchanges via the CIM may offer and are committed to working with Ofgem and others to develop a workable, revised timescale alongside the establishment of a suitable governance framework for the CIM.

The appendix to this letter provides additional context and a proposed timescale for development and we would welcome engagement with Ofgem to establish a way forward.



Yours sincerely,

Paul McGimpsey Director Markets & Regulation Energy Networks Association

Copied to:

Steve McMahon, Director for Network Price Controls, <u>Steven.McMahon@ofgem.gov.uk</u> Ransford Amponsah, Senior Technical Advisor, <u>Ransford.Amponsah@ofgem.gov.uk</u>

On behalf of:

- 1. Electricity North West Limited
- 2. Northern Powergrid (Northeast) plc
- 3. Northern Powergrid (Yorkshire) plc
- 4. SP Distribution plc
- 5. SP Manweb plc
- 6. Scottish Hyrdro Electric Power Distribution plc
- 7. Southern Electric Power Distribution plc
- 8. Eastern Power Networks plc
- 9. London Power Networks plc
- 10. South Eastern Power Networks plc
- 11. National Grid Electricity Distribution (East Midlands) plc
- 12. National Grid Electricity Distribution (West Midlands) plc
- 13. National Grid Electricity Distribution (South West) plc
- 14. National Grid Electricity Distribution (South Wales) plc



Appendix 1 – Further Context and LTDS CIM Working Group Proposal

Since the start of 2024, the DNOs have proactively collaborated to improve their understanding of the LTDS CIM and develop their capabilities to exchange data using the CGMES v3.0 CIM profile. They have successfully produced a CGMES v3.0 EQ Profile for one GSP in each licence area and have undertaken interoperability testing of those profiles. The DNOs remain committed to meeting the requirements set out in the document "Form of the Long-Term Development Statement" published by Ofgem on 30 April 2024 and recognise the value that data exchanges via CIM may offer.

In recent weeks the LTDS CIM Working Group raised concerns about a number of the technical queries received from software vendors regarding the development of CIM LTDS profile extraction capabilities which comply with the LTDS schema and the pace at which these developments are occurring. Further, the lack of any formal GB CIM Governance has the potential to result in divergent profile extensions if development is not carefully managed. Interoperability and conformity testing require defined SHACL constraints and the use of suitable validation tools containing the LTDS CIM schema.

Whilst there is uncertainty around when these capabilities will become available, the DNOs do not consider the production of the LTDS CIM EQ profile by 15 October 2024 to be possible. In line with the direction issued in accordance with paragraph 25.2 of standard licence condition 25, as DNOs have become aware of issues preventing them from producing the Grid Modelling Data Results by the relevant deadline, we are looking to proactively agree alternative milestone dates with Ofgem.

The LTDS CIM Working Group recognises the dependence on software vendors to develop profile extractors and the practicalities of establishing a governance function. These include the need to identify the appropriate scope (which Ofgem has recently advised should be expanded to include Grid Code requirements), a suitable funding mechanism, seek approval to ensure the budget is available and agree roles and responsibilities within the governance function. Whilst the timelines associated with these dependencies cannot currently be defined, the LTDS CIM Working Group is keen to work with Ofgem to agree on a pragmatic approach to develop a realistic timeline.

The LTDS CIM Working Group will continue to support software vendors with the development of LTDS profile extraction capabilities, working to agree a date when these capabilities will become available. The LTDS CIM Working Group will also progress the establishment of GB CIM Governance, facilitating the interim arrangement until an enduring capability is established in 2025. Once delivery dates for these capabilities are available, a date for LTDS EQ Profile production can also be agreed which is currently anticipated to be in November 2025. The process to develop the LTDS EQ Profiles will likely mirror that of stages 1.1 and 1.2, with the production of an initial sample containing one GSP. Interoperability and conformity testing will help prove SHACL constraints and ensure validation can be undertaken. The LTDS EQ profile for the full network of each licence area is anticipated to be delivered in November 2025.

The LTDS CIM Working Group would like to discuss this proposal with Ofgem either to agree the proposed approach or to consider a realistic alternative.



Proposed steps to develop the LTDS EQ Profile

Milestone	Requirements	Deadline
Establishment of GB Governance	 Establish a group to handle the technical details of new GB CIM profiles such as LTDS, GC0139 etc. Agree on the Working Group actors and funding mechanism Include CIM experts for extensions and modifications consultations. Arranging regular meetings to agree on the GB CIM modifications. The CIM WG is currently performing the above tasks until agreement on a formal representation is reached. 	Q4 2024 Then ongoing tasks.
2. Integrated LTDS CIM Extractor within Modelling Systems (Import/Export capability)	 Vendors to add the required LTDS extensions to the systems and DNOs to populate with data values. Cooperation with the vendors to address feedback such as issues regarding CIM schema, their applications, and any modelling issues, such as the issue of common impedance and the inclusion of Equivalent Branch. Cooperation with CIM Governance (technical and administrative functions) and software vendors to correct errors or address feedback. 	Q2 2025 Development task
3. Adding LTDS data that are related to LTDS extensions.	DNOs are required to add LTDS data to their network models.	Q2 2025
4. Network reductions	 Performing network reductions via equivalencies and creating boundary grids. 	Q2 2025
5. Extract One GSP for each licence area as EQ LTDS for each License area ready for Interoperability (IoP) testing (Based on LTDS Profile - Extensions and Deviations from CGMES v3.0).	Successful application of integrating the LTDS extractor within the Modelling System, applying the LTDS data inclusion (milestone 3), and performing network reductions (milestone 4).	Q3 2025 (Production)



6. IoP test results	 Perform IoP test and address feedback to vendors and schema providers. Conduct schema verification using an external tool. 	Q3 2025
7. Extract and publish the whole license areas as EQ LTDS	 Publish the Whole license areas as EQ LTDS Perform an internal IoP test if needed. 	30 November 2025 (Publication)

Table 1 – Steps required to publish an LTDS CIM EQ Profile

Deferral of milestone stage 1.3 will inevitably impact the delivery timescales for other LTDS profiles such as SC, SYSCAP, DL, GL etc, noting those profiles which diverge further from CGMES require further development. The full impact of the deferral will need to be considered more fully, including on whether CIM identifiers will be required in the heatmap outputs.

On behalf of all the DNOs

Thursday, 31 October 2024

To: Liam Bennett

Head of Energy System Digitalisation

Energy Systems Management and Security

Ofgem

10 South Colonnade,

Canary Wharf,

E14 4PU

Sent by email: Liam.Bennett@ofgem.gov.uk

Subject: Proposed Revised Timeline for Delivering LTDS in CIM Format

Dear Liam,

In September 2024, Ofgem agreed to consider a new timeline for delivering LTDS Stage 1.3 in CIM format, per the direction under paragraph 25.2 of Standard Condition 25 of the Electricity Distribution Licence. In accordance with paragraph 3 of this direction, all fourteen Distribution Network Operators (DNOs) collectively propose a revised timeline for delivering LTDS in CIM format.

Given the interdependencies on Stage 1.3 and its associated efforts, the schedules for Stages 2 and 3 are likely to be impacted. Nonetheless, the DNOs are committed to executing tasks in parallel, where feasible, to accelerate progress.

This proposed timeline, as outlined in the appendices, considers technical requirements and external dependencies. DNOs are also developing new modelling strategies to sustain the CIM LTDS profiles for future publications as part of business-as-usual operations.

Proposed Revised Timeline (see Appendix for detail)

Stage 1.3: EQ

The extended timeframe for Stage 1.3 publication to <u>28 November 2025</u>, will enable DNOs to develop the Equipment (EQ) profile to meet the new CIM LTDS standard and complete the necessary Interoperability (IoP) tests. The current ENA CIM working group will fulfil the governance functions. Draft outputs would be provided to Ofgem on 15 October 2025 for visibility.

Stage 2: SC and SYSCAP

To provide short circuit (SC) and system capacity (SYSCAP) profiles and link it with connectivity nodes, Stage 2 will require integrating additional data sources, such as the Embedded Capacity Register (ECR) data, and addressing CIM extractor issues. We propose deferring the Stage 2 publication timeline from 31 May 2025 to 29 May 2026. However, the DNOs will continue efforts

to advance work in parallel to potentially align this stage's delivery with the 30 November 2025 LTDS publication.

Stage 3: SV, GL, and DL profiles, plus future network developments

Stage 3 will deliver the SV, GL, and DL profiles and further integrate the ECR for accepted projects to support network development projects. Considering the additional requirements for modelling these future development projects over the next five years, the complexity of geographic integration, and the concurrent effort to deliver GC0139 in CIM format in 2026, we propose deferring the Stage 3 publication from 30 November 2025 to 30 November 2026. Draft outputs would be provided to Ofgem on 15 August 2026 for visibility. DNOs will provide technical feedback to Ofgem throughout Stage 3 to ensure alignment with requirements and timeline.

Heatmaps

Recognising that the standardised Heatmap relies on data from the completed EQ LTDS profile, we propose its publication six months after that LTDS delivery, so expected to be published by 29 May 2026. Draft outputs would be provided to Ofgem on 15 April 2026 for visibility. This timeline ensures the Heatmap's data is robust, standardised, and valuable for stakeholders.

We appreciate Ofgem's understanding of the complexities involved in these deliverables and remain committed to advancing work across stages as efficiently as possible. The attached appendices provide comprehensive details on the timelines and milestones. We look forward to continued collaboration to ensure the successful implementation of the LTDS in CIM format.

Yours sincerely

Scottish Power Energy Networks

UK Power Networks

Electricity North West Limited

Northern Powergrid

National Grid Electricity Distribution

Scottish and Southern Electricity Networks

Appendices: LTDS CIM WG - Proposed LTDS milestone dates

The appendices present new dates associated with stages 1.3, 2 and 3. These are intended to balance a desire to keep progress moving while considering technical challenges faced by the DNOs, software vendors and stakeholders. Where appropriate, two dates may have been included for discussion to reflect the best- and worst-case scenarios.

The rationale for the proposed dates is included against each milestone deliverable.

Stage 1.3 (original requirement): Produced by 15 October 2024 and published by 30 November 2024 – provision of EQ profile for the whole licence area

Stage 1.3 (revised timeline): Produced by 15 October 2025 and published by 28 November 2025.

1.3 Licensees produce a CIM Physical grid Model (EQ profile only) representing the existing grid of the entire licence area.

To enable early interoperability validation of partial solution implementations, the EQ Models produced for Stage 1.1 can conform to any of the following:

- CGMES v3.0 (a set of SHACL constraints already exists for this EQ profile)
- CGMES v3.0 less LTDS deviations
- CGMES v3.0 less LTDS deviations and plus LTDS extensions (the LTDS EQ profile).

The EQ Model representing the licence area grid which is published for the November 2024 LTDS publication cycle must, however, conform to the LTDS EQ profile (CGMES v3.0 less LTDS deviations and plus LTDS extensions).

1. CIM Governance (31st Dec 2024)

The Technical CIM WG has been established and has good membership coverage and agreed Terms of Reference. It has been collectively agreed the group will provide governance until a formal arrangement has been established. 2024 funding for technical support should be available through the ENA's DDSG and will be used to engage outsourced consultancy subject matter experts on a continuing basis. They will support the group to help make informed decisions, delivering outputs that are achievable and implementable from a technical perspective.

A more formal governance arrangement will likely be provided by a contracted vendor and their proposal has been refined and, subject to networks' approval, should establish formal governance in 2025.

For these reasons the Q4 milestone is achievable by 31st Dec as a) an interim arrangement will be in place, and b) contracted vendor 's formal proposal should have been agreed by this date, with commercial discussions progressing and funding for 2025 agreed.

2. LTDS CIM Extractor (1 March 2025)

Software vendors were contacted for their views on when extraction capabilities should be available within their software, and they responded positively. Some extraction capabilities are already in place, and it is expected that as the group begins to extract LTDS EQ profiles any teething issues will be resolved in a timely manner.

A suggested date for implementation of a complete extraction capability is 1st March 2025 which allows more than 5 months for DNOs to undertake testing, providing feedback to each software vendor as appropriate. The group should approach this task in a structured, collaborative manner to ensure these dates are achievable.

3. Adding LTDS data to DNO's models (1 April 2025)

To identify the data that's required for the LTDS EQ profile the group should utilise the appendices of the LTDS reform statement publication. Once understood, a gap analysis of the data required against the data contained in their network models can be undertaken. The data requirements of the EQ profile are not expected to be too extensive, and it is anticipated this work can happen in parallel with testing of the LTDS CIM extractor.

One additional month is included in the table for step 3, but this should be an area that DNOs can accelerate their progress against the revised milestone 1.3 deadline.

4. Network reductions (1 May 2025)

There are some outstanding technical queries regarding how network reductions should be considered in the DNO's network models. Despite this, the reductions are not anticipated to be any more challenging than those undertaken for the CGMES EQ profile production.

One issue that may arise relates to volume of sites, especially if any DNOs are undertaking manual reductions. There is also some difficulty in verifying outputs to ensure that reductions have been completed. Again, this is often a largely manual task.

5. Extract single GSP LTDS EQ profile (31 May 2025)

This output is reliant on a reliable LTDS extractor in the software, the development of any scripts to act as an intermediate stage between the DNO's network and the extraction tool and the addition of all relevant data having been added to the network models. Once complete, the production of the LTDS EQ profile is expected to be relatively straight forward, with only minor checks and validations being required.

This milestone includes a one-month period from step 4 to address any technical issues that arise. However, assuming these were addressed at stage 3 there should be an opportunity for DNOs to outperform the targeted dates.

6. loP test results (31 July 2025)

It is anticipated that cross-software IoP tests will highlight additional issues that will need to be addressed. The group will also need to ensure that SHACL constraints have been fully defined.

Hopefully the majority of issues will have been highlighted by this stage but a further two months have been included to undertake IOP tests and correct any issues.

7. Extract the whole licence area as an LTDS EQ profile (15 October 2025)

One month is required for the production of a full network LTDS EQ profile. If the process has been automated, then this time period should be ample. If it is a manual process, then this time scale is likely to be challenging.

8. Publish whole licence LTDS EQ profile (28th November 2025)

Publication of the LTDS CIM EQ profile has been aligned with the publication of the traditional LTDS files in November.

Table 1 provides a summary of the proposed dates. Dates in **bold** are the proposed official deadlines with the earlier date acting as the date the DNOs should aim for.

Milestone	Requirements	Deadline
Establishment of GB Governance	 Establish a group to handle the technical details of new GB CIM profiles such as LTDS, GC0139 etc. Agree on the Working Group actors and funding mechanism Include CIM experts for extensions and modifications consultations. Arranging regular meetings to agree on the GB CIM modifications. The CIM WG is currently performing the above tasks until agreement on a formal representation is reached. 	31 Dec 2024 – depending on commercial progress Then ongoing tasks.
2. Integrated LTDS CIM Extractor within Modelling Systems (Import/Export capability)	 Vendors to add the required LTDS extensions to the systems and DNOs to populate with data values. Cooperation with the vendors to address feedback such as issues regarding CIM schema, their applications, and any modelling issues, such as the issue of common impedance and the inclusion of Equivalent Branch. Cooperation with CIM Governance (technical and administrative functions) and software vendors to correct errors or address feedback. 	1 Feb 2025 1 Mar 2025 Development task
3. Adding LTDS data that are related to LTDS extensions.	DNOs are required to add LTDS data to their network models.	1 Mar 2025 1 Apr 2025
4. Network reductions	 Performing network reductions via equivalencies and creating boundary grids. 	1 Apr 2025 1 May 2025
5. Extract One GSP for each licence area as EQ LTDS for each License area ready for Interoperability (IoP) testing (Based on LTDS Profile - Extensions and Deviations from CGMES v3.0).	Successful application of integrating the LTDS extractor within the Modelling System, applying the LTDS data inclusion (milestone 3), and performing network reductions (milestone 4).	30 Apr 2025 31 May 2025
6. IoP test results	 Perform IoP test and address feedback to vendors and schema providers. Conduct schema verification using an external tool. 	30 Jun 2025 31 Jul 2025
7. Extract the whole license areas as EQ LTDS	 Extract the Whole license areas as EQ LTDS Perform an internal IoP test if needed. 	31 July 2025 15 October 2025
8. Publish LTDS EQ files	Addressing any feedback from stage 7 and publish the outcome, the EQ files	28 Nov 2025

Table 1 Milestone Summary for stage 1.3

Stage 2 (original requirement): Produced by 15 April 2025 and published by 31 May 2025 – provision of EQ, Short Circuit (SC) and System Capacity.

Stage 2 (revised timeline): Produced by 15 April 2026 and published by 29 May 2026.

Licensees produce the following:

- CIM Physical grid Models (EQ and SC profiles) representing the existing grid of the licence area accompanied by a SYSCAP profile Model with bus group noncoincident historic peak load, system capacity, and fault level information.
- CIM Physical grid Models (EQ and SC profiles) representing each of five future years of the licence area grid accompanied by a SYSCAP profile Model with bus group load forecasts for each year.

Note the activities of this Stage create future Models which ensure that the LTDS ConnectivityNodes exist whose identifiers are referred to in ECR entries for accepted-to connect generation.

The group's view of these requirements

Provision of EQ Profile: As per the milestone 1.3 deliverable, so by stage 2 this will become a BaU activity.

Provision of Short Circuit profile: The exchange of data to enable stakeholders to calculate short circuit is out of scope. This profile is simply exchanging fault level information, mirroring what is already included in the LTDS. Once the profile is available in the software population of it should be relatively straight forward to populate/provide.

Provision of System Capacity profile: This is a new profile that needs to be created to facilitate the exchange of this information. The values contained within the LTDS largely meet this requirement currently, therefore provision of this information once the profile is available within the software should be relatively straight forward.

Clarification of what is required in relation to the future network is required. The assumptions are:

- ECR data (accepted to connect) are aggregated to the Primary busbar where the connections are inset within the HV network and shown as a named connectivity node at the Point of Common Coupling when connected directly to the EHV network.
- System capacity and fault level are provided based on the known development work over the five-year period.
- The network reinforcements and extensions associated with the five-year period are not required in stage 2. Without these SYSCAP and SC will be a best estimate, rather than an exact figure.

Stage 3 (original requirement): Produced by 15 August and Published by 30 November 2025 – provision of solved cases; Geospatial Location (GL) Models for the existing licence area grid and the future grid for each of the next 5 years; licensee grid development projects as Difference Models.

Stage 3 (revised timeline): Full scope produced by 15 August 2026 and published by 30 November 2026.

3.1 Licensees produce complete LTDS in CIM grid model data, including:

- The required historic solved cases, each composed of CIM Models containing Physical data (EQ, SC and GL profiles), Diagram Layout data (DL profile), Situation data (SSH profile), and Solution data (TP and SV profiles).
- CIM Physical grid Models (with GL profiles in addition to EQ and SC) accompanying the existing and future SYSCAP profile Models.
- CIM Difference Models for all firm development projects (where finance has been secured).

Note that the activities of this Stage create Difference Models for licensee development projects whose identifiers can be used in Embedded Capacity Register (ECR) entries to indicate projects on which an accepted-to-connect generation connection depends.

The group's view of these requirements

These requirements represent a significant increase in the demands placed on the DNO. They require:

- a. Geospatial information to be available within the network modelling tool, including both point (substation etc.) and linear (circuits) assets. This suggests an integration to some extent of the GIS and modelling software and the associated data management practices to align this data (such as naming convention, units of measure, unique keys, etc.).
- b. The development of situation data suggests an integration to some degree of the Control System and the modelling software which includes the data management challenges flagged in point a.
- c. Providing difference models for all accepted schemes where funding is secured may represent a change to the way an organisation combines their network-related expenditure, their customer-related expenditure and the development of the master model they hold in their network modelling software.
- d. Provision of many of these profiles is a new requirement and may face similar challenges to those encountered with the revised EQ profile required for the LTDS.
- e. While certain DNOs use power system software with options capable of recording network differences, other software vendors used by different DNOs will need to enhance this functionality within tight timelines. Otherwise, DNOs will need to migrate network data to alternative systems and potentially requiring separate models for the LTDS.

Table 2 – Revised Grid Modelling Data Result Deadlines based on Table 7 in the Form of Long-Term Development Statement.

Stage	Stage deliverables	Current deadline	Proposed Deadline
Stage 0	A solution design and a plan outlining the solution implementation activities of each Stage	15 March, 2024	Finalised
Stage 1			
1.1	An Equipment (EQ) Model representing the existing grid of a single GSP	15 June, 2024	Finalised
1.2	Interoperability validation of the GSP EQ Mode	15 July, 2024	Finalised
1.3	An Equipment (EQ) Model representing the existing grid of the entire licence area	Production: 15 October, 2024 Publication:30 November, 2024	Production:15 October, 2025 Publication: 28 November, 2025
Stage 2	EQ, Short Circuit (SC) and System Capacity (SYSCAP) Models representing the existing licence area grid and the future grid for each of the next 5 years	Production:15 April 2025 Publication: 30 May, 2025	Production:15 April 2026 Publication: 29 May, 2026
Stage 3	Solved cases; Geospatial Location (GL) Models for the existing licence area grid and the future grid for each of the next 5 years; licensee grid development projects as Difference Models	Production:15 August, 2025 Publication: 30 November, 2025	Production:15 August, 2026 Publication: 30 November, 2026