

**NESO Code**  
**Administrator**  
**Consultation on**  
**GC0139: Enhanced**  
**Planning - Data**  
**Exchange to Facilitate**  
**Whole System**  
**Planning**

6 February 2026

## Introduction

This consultation response is submitted on behalf of the Energy Network Association (ENA) GC0139 Common Information Model (CIM) Working Group, with the agreement of all group members and reflects the collective concerns of the group regarding the proposed timeline for the implementation of GC0139. Please find an Abbreviations and Definitions section at the end of this document.

The ENA GC0139 CIM Working Group comprises representatives from NESO, DNOs and modelling product vendors. Our feedback is limited to concerns regarding the implementation timescales.

Individual stakeholders may submit their own individual responses to the Code Administrator's Consultation with any concerns they have.

It is our view that the proposed January 2027 implementation date is not realistically achievable due to the required development of CIM profiles along with extensions and deviations to CGMES 3.0/LTDS CIM and DNO/TOs and vendor implementation lead-times. We propose first DNO submission under GC0139 Grid Code modifications (including all CIM and non-CIM data exchanges) should be made in January 2028, assuming NESO provide the data required to DNOs by September 2027. Both NESO and DNOs would continue the existing Grid Code data exchange arrangements until the full GC0139 requirements have been implemented. Further below timelines are subjected to the following assumptions:

- Timely recruitment of CIM experts to develop the GC0139 required CIM profiles and related artefacts;
- The technical CIM requirements set in the proposed GC0139 legal text are accurate and acceptable to develop required CIM profiles;
- Vendors' timely implementation of GC0139 CIM profiles; and
- CGMES v3.0 and GC0139 interoperability tests are successful in accordance with the proposed implementation programme.

This revised timeline, in our view, is more realistic given the scale of development work required and the dependencies on industry parties and vendors.

**Table 1: Proposed milestones and their estimated timelines**

Milestones	Timeline (est.)
NESO provide data to support Jan 2028 DNO CIM submission by week 38	Sep 2027
1st GC0139 submission from DNOs to NESO by week 02	Mid Jan 2028
1st GC0139 submission from NESO to DNOs by week 12	Mar 2028

It is our view that the current implementation date of January 2027 presents significant delivery risks and is unlikely to be achievable.

The risks and associated implications outlined below relate specifically to the development and implementation of the GC0139 CIM requirements. The programme we proposed is based on addressing and resolving these issues.

## 1. Lack of Clear Technical Requirements & Uncertainty in Scope

Guidelines for CIM implementations are not yet clearly defined and need to be developed. These developments include uncertainty around required CIM objects, data granularity, modelling depth, and the extensions needed. This lack of clarity results in inconsistent interpretation across DNOs, difficulty in planning, and an inability to estimate resource or budget needs; and hence need to be addressed.

**Implication:** Without early, comprehensive guidance being developed by the ENA GC0139 CIM Working Group, DNOs cannot mobilise effectively, increasing the risk of misaligned implementations and delayed delivery.

## 2. CIM Extensions, Profile Definition & Alignment With LTDS

The implementation of GC0139 requires CGMES v3.0 extensions/deviations to be developed; these are not yet agreed across DNOs, TOs, and NESO.

These extensions must be finalised by the ENA GC0139 CIM Working Group before any vendor can implement solutions.

There is also a key dependency on alignment with LTDS CIM work. Although LTDS progress helps inform stakeholders how to implement GC0139, it needs its own confirmed profile to avoid divergence or duplication of effort.

**Implication:** Until a stable, agreed CIM profile exists (including gap analysis vs LTDS), the industry cannot begin technical development.

## 3. Vendor Readiness & Tooling Availability

There is a significant concern that CIM product vendors (e.g., DIGSILENT, TNEI and others) need early visibility of the final profile, along with clear development timelines and test windows.

Vendors, who are already supporting LTDS development, are concerned that they may struggle to resource GC0139 development at the same time as implementing the LTDS CIM.

**Implication:** Vendor delays will directly impact DNOs deliverability.

## 4. Industry-Wide Resource Capacity Constraints

All stakeholders highlighted serious pressure on internal resource availability, including:

- Limited CIM expertise;
- Competing deadlines with major LTDS CIM submissions due in 2026;
- At the moment, the unclear GC0139 CIM implementation workload making it difficult to establish the development resourced and allocated the required staff; and
- The risk of overstretching the small pool of CIM experts across GB

**Implication:** GC0139 and LTDS Reform draw on the same scarce skills, creating a substantial risk of missed milestones across both programmes.

## 5. Process, Tooling & Boundary Coordination Challenges

Once requirements are confirmed, DNOs will need to build and adapt:

- Both export and import functionality;
- Internal model management;
- Asset-to-CIM mapping logic; and
- Interoperability tests and trial model exchanges.

This will all require resources to be available.

Additional coordination challenges include:

- Managing Interface Boundary Point data jointly with TOs;
  - This activity is planned under NESO eMIDS project but has not yet been tested or embedded into BAU. Delays to eMIDS could therefore impact GC0139 timelines.
- Ongoing change control and governance; and
- Trial submission (Interoperability) uncertainties, including tooling readiness and time for multiple test cycles.

**Implication:** Significant operational setup is required, and insufficient time for testing means that it is unrealistic to achieve a January 2027 implementation.

## Abbreviations and Definitions

### Abbreviations

Abbreviation	Definition
<b>CAC</b>	Code Administrators Consultation
<b>CGMES</b>	Common Grid Model Exchange Standard (v3.0)
<b>CIM</b>	Common Information Model
<b>DNO</b>	Distribution Network Operator
<b>ENA</b>	Energy Networks Association
<b>GB</b>	Great Britain
<b>GC0139</b>	Grid Code Modification GC0139 relating to CIM-based model exchange
<b>LTDS</b>	Long-Term Development Statement
<b>NESO</b>	National Electricity System Operator
<b>TO</b>	Transmission Owners
<b>WG</b>	Working Group (e.g., ENA GC0139 CIM Working Group)

### Definitions

#### **CIM — Common Information Model**

A standards-based, UML information model maintained by IEC that provides a common, semantic data model for electric power systems across transmission and distribution.

#### **CGMES — Common Grid Model Exchange Standard**

A profiled use of CIM that defines structure, rules, and exchange profiles for grid model data required for regional and pan-European studies and operations, led by ENTSO-E and standardized in IEC 61970-600-1/-2.

#### **Difference Model (CIM / CGMES)**

A mechanism to express changes relative to a baseline model—using forward and reverse “difference” constructs—so systems can apply deltas rather than resend complete models.

#### **LTDS — Long-Term Development Statement**

A regulatory data requirement that GB Distribution Network Operators (DNOs) must publish under Ofgem direction and licence SLC 25, describing their networks and development proposals. Recent reforms require machine-readable grid models using CIM.

## **Gap Analysis (LTDS vs GC0139)**

A comparison of LTDS CIM and CGMES v 3.0 with GC0139 CIM data models to identify overlaps, missing objects, and areas where profiles diverge. This gap analysis was done over a year ago and needs refreshing as LTDS CIM has changed significantly over the period.

## **CIM Extensions (from LTDS or CGMES 3.0)**

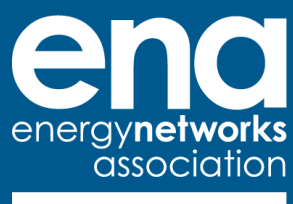
Custom additions to the base CIM schema (CGMES v3.0 and LTDS CIM) required where existing CIM elements do not support GC0139 modelling needs. Specifications explicitly allow such extensions when required, governed by the profiling rules in the IEC 61970 600 series and supporting materials.

Extensions may include:

- new object classes,
- additional attributes,
- new relationships, or
- enhancements to capture UK-specific data requirements.

## **CIM Deviations (from LTDS or CGMES 3.0)**

Intentional structural or definitional differences which exist in base CIM schema, CGMES v3.0 or LTDS CIM profiles but we may exclude them from GC0139 CIM profiles as they are not in the scope of GC0139.



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