

Guidance

Whole Electricity System Guidance – Standard licence condition [D17]~[7A]: Licence obligations to ensure coordination and cooperation in planning and operating the whole electricity system

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This guidance document provides explanation and clarification of how we expect Electricity Distributors and transmission owners to interpret standard licence condition [D17]~[7A], the Whole Electricity System Licence Condition.

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1. Introduction

The Electricity Act 1989¹ requires that electricity transmission and distribution networks are developed and maintained in an efficient, coordinated and economical manner. Traditionally, Electricity Distributors and transmission owners have focused on their own networks in isolation when considering how best to achieve this objective.

Established practices are evolving, necessitating further clarifications on our expectations under the Electricity Act 1989. As we set out in the Smart Systems and Flexibility Plan,² efficient decision-making on energy network planning and operation requires comprehensive knowledge and understanding of the full range of solutions. These solutions may lie outside an Electricity Distributors or transmission owner’s own boundary, and may include varying degrees of contribution from other network licensees and non-network parties.

This guidance document provides further explanation of standard licence condition (“SLC [D17]~[7A]”). 7A will affect electricity Distribution Network Operators and electricity Independent Distribution Network Operators. D17 will affect onshore electricity transmission owners; it will not affect off-shore electricity transmission owners or the Electricity System Operator. For the purposes of this document, SLC [D17]~[7A] will be referred to as the Whole Electricity System Licence Condition. The principles-based obligations in the Whole Electricity System Licence Condition are focussed on outcomes, so that the behaviours to achieve the outcomes can evolve in a rapidly changing electricity sector.

The purpose of this document

The purpose of this document is to provide guidance on what we expect from onshore Electricity Distributors and transmission owners under the Whole Electricity System Licence Condition. This guidance also serves to inform wider stakeholders what they can expect from the relevant network companies, to support a more transparent and efficient framework overall.

¹ Section 9 of the 1989 Electricity Act: <http://www.legislation.gov.uk/ukpga/1989/29/section/9>

² <https://www.ofgem.gov.uk/publications-and-updates/upgrading-our-energy-system-smart-systems-and-flexibility-plan>

Under the Whole Electricity System Licence Condition, licence holders must evidence their performance of the obligations by way of publishing a register on their website. This guidance includes information on our expectations in regard to demonstrating compliance.

We recognise that the continual change in the energy system may mean that the Guidance needs to change in future. We will therefore keep it under review.

Principles and proportionality

Licence condition [D17]~[7A] is a principles-based licence condition: this means that it sets outcomes, or realisable goals for Electricity Distributors and transmission owners, without prescribing detailed or onerous steps that Electricity Distributors and transmission owners must follow to reach these outcomes. By taking this approach, it is within the gift of the Electricity Distributors and transmission owners to determine the most appropriate mechanisms to reach the outcomes, allows proportional steps to be taken to do so, and facilitates changes in these steps over time, as appropriate. For example, licence condition [D17]~[7A] obliges Electricity Distributors and transmission owners to consider proposals for whole electricity system actions and processes provided by network users; the degree of consideration given is expected to be proportionate to the strengths of proposal, and the Electricity Distributors and transmission owners should be transparent in its justification for the degree of consideration given.

Transmission owners and Electricity System Operator interactions

In view of the separation of the ESO and National Grid Electricity Transmission plc, we recognise that network users may approach these parties separately to bring forwards proposal for whole electricity systems outcome. If a network user approaches the ESO, we expect that they will share relevant information with transmission owners, in line with their obligations under licence condition C16.

2. 2. Definitions

In order to ensure clarity and consistent interpretations, we have provided guidance on the meaning of the following phrases in the context of the Whole Electricity System Licence Condition. Cooperation and Coordination are commonly understood term and are therefore not defined in the licence. We would expect Electricity Distributors and transmission owners to use them as they exist in their ordinary meaning when interpreting their licence conditions.

Coordination

Coordination is used in part A of the whole systems licence condition, at paragraphs [D17.2~7A.2 / D17.3~7A.3], in relation to electricity network licensees only, and in practice refers to:

- The effective management and organisation of internal activities and processes that enable electricity network licensees to work together effectively. This may include prioritising, scheduling and sequencing activities, processes and data sharing activities across electricity network licensees. As the energy system evolves, coordination will ensure that Electricity Distributors' and transmission owners' initiatives, investment planning, and operational processes are sufficiently able to identify and apply the most efficient activities and processes overall, accounting for activities and processes outside the Electricity Distributors' and transmission owners' networks. Coordination mitigates risks of duplication and unnecessary additional costs that are not in consumers' best interests.

Cooperation

Cooperation is used in Part A of the Whole Systems Licence Condition, at paragraphs [D17.2~7A.2 / D17.3~7A.3] in relation to electricity network licensees only, and in practice refers to:

- The process of working together in pursuit of common goals: where two or more parties have an objective that is mutually dependant and they support each other in achieving a beneficial outcome. Combining efforts could relate to the sharing of technological resources, data, digital services, information, or skills. These actions can contribute to faster development of innovations, economies of scale and scope, reducing a cost burden, or spreading risk.

- Complying readily with reasonable requests: this means acting in accordance with, and complying with, requests from other electricity network licensees where there is a benefit to the whole electricity system and no detriment to their own network. This extends to not creating undue barriers or difficulties for other electricity network licensees seeking to work with or gain data and information from that Electricity Distributor or transmission owner.

Whole electricity system outcomes

Whole electricity system outcomes arise from actions taken between two or more parties, at least one of whom holds an electricity transmission or distribution licence, that result in both:

- Minimisation of the sum expenditure on transmission and distribution electricity networks; and
- Improving or, at a minimum, maintaining the services and benefits received by customers of the electricity network.

3. Part A: Whole electricity system coordination

Part A of the Whole Electricity System Licence Condition covers the coordination and cooperation that is required between electricity network licensees. This part of the condition comprises three clauses and a logic test. In this guidance, clause 1 is used to refer to paragraph [D17.2]~[7A.2], clause 2 for paragraph [D17.3]~[7A.3], and clause 3 for paragraph [D17.4]~[7A.4], which is further divided into sub-clauses 3a and 3b.

In the event that we determine an Electricity Distributors or transmission owner has breached one or more relevant licence conditions, we may take enforcement action. The factors we take into account when considering enforcement action are set out in our Enforcement Guidelines.³

All opportunities for whole electricity system outcomes identified and considered under clauses 1 and 2 are assessed against the requirements set out in sub-clauses 3a and 3b. If both sub-clauses a and b are satisfied (that is, that the opportunity does not negatively affect the operation of the Electricity Distributor's or transmission owner's network and is in the interest of the efficient and economical operation of the electricity system), the Electricity Distributors and/or transmission owners in question must use all reasonable endeavours to implement the identified opportunity. Figure 1 sets out the logical flow of Part A of the Whole Electricity System Licence Condition.

³ <https://www.ofgem.gov.uk/publications-and-updates/enforcement-guidelines>

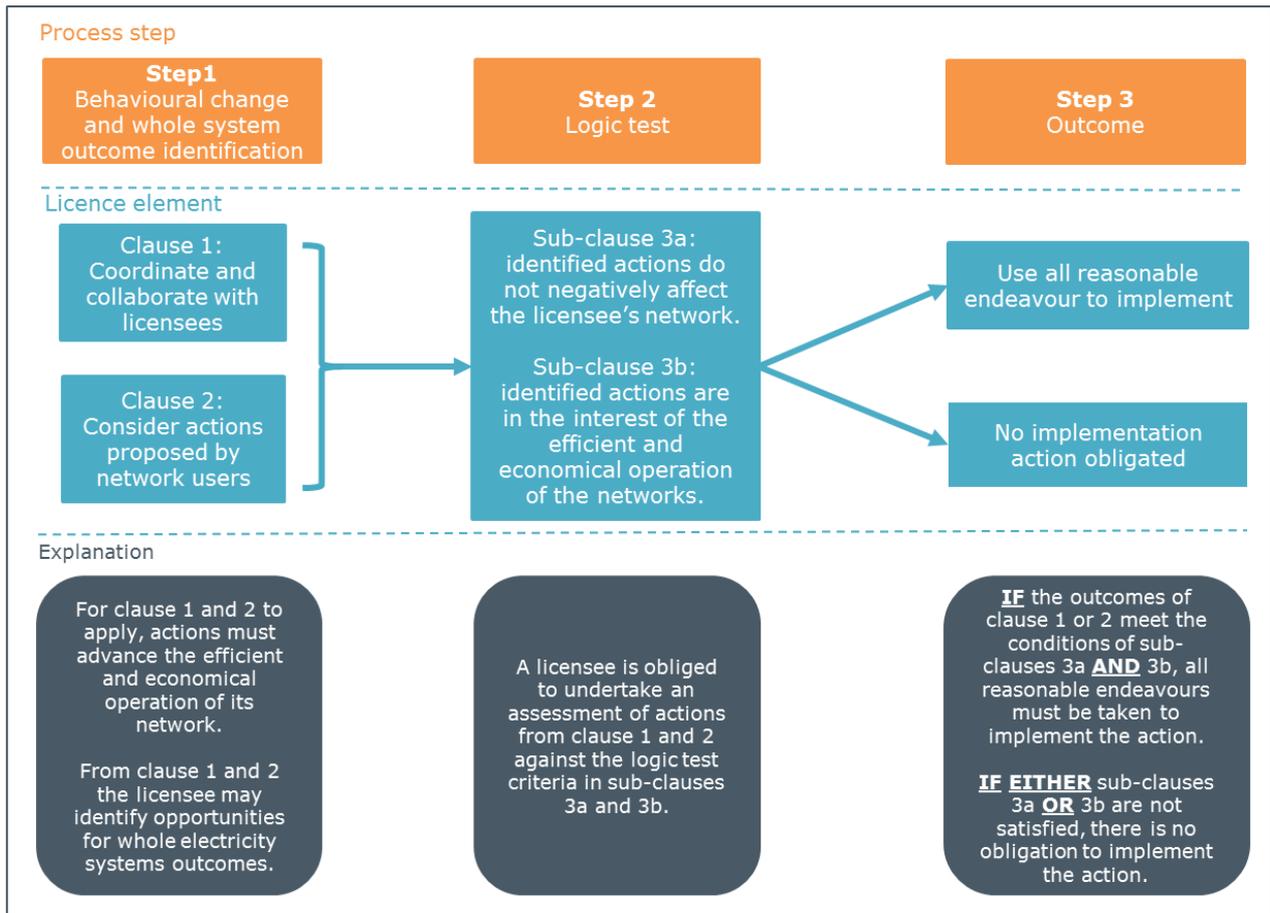


Figure 1. Logic flow of part A of the Whole Systems Licence Condition.

Clause [D17.2]~[7A.2] (clause 1)

[D17.2]~[7A.2] The licensee must coordinate and cooperate with other Electricity Distributors and Transmission Licensees to identify actions and processes that advance the efficient and economical operation of their networks.

The Electricity Distributors and transmission owners are obligated to proactively assess actions and processes with the potential to improve the efficient and economic operation of their network. Moreover, the Electricity Distributors and transmission owners are required to effectively participate in processes that facilitate appropriate communication of operational data and information sharing between electricity network licensees to enable the achievement of whole electricity systems outcomes.

An example of coordination could be an electricity network licensee approaching relevant Electricity Distributors and Transmission Owners to identify the benefits of procuring market services in their networks in a coordinated fashion to achieve a more efficient and economical outcome. Another example is the identification of a common set of criteria and a methodology to appraise opportunities for whole electricity system outcomes. This would allow Electricity Distributors and transmission owners to assess improvement opportunities in a codified and prioritised fashion. Such criteria and the methodology could identify certain activities, such as voltage control, that span more than one network area. Equally, it could also identify certain conditions, such as proximity to boundary locations, that increase the likelihood of wider system impacts.

An example of cooperation is where an electricity network licensee approaches another electricity network licensee for data and information on the feasibility of a project; both parties then make that data and information available to one another in a useable format and timely fashion, subject to existing conditions relating to competition and data law.

Clause [D17.3]~[7A.3] (clause 2)

[D17.3]~[7A.3] The licensee must consider actions proposed by [Distribution System Users] ~[Transmission System Users] which seek to advance the efficient and economical operation of its network.

In considering proposals from Distribution and Transmission System Users, the Electricity Distributor or transmission owner could develop a prioritisation system to analyse the proposals in a clear and consistent manner. Such a system would provide clarity and transparency to the proposal consideration process.

For example, a network user may propose an action to trade capacity and associated outage positions with other network users. This position could be informed by improved data and information availability, such as an Electricity Distributor's or transmission owner's resource register. On receipt of such a request, an Electricity Distributor or transmission owner should determine whether it is in the interest of the efficient and economical operation of the network and, if it is, consider the request. While the obligation under this clause is limited to *considering* what network users propose, the Electricity Distributor or transmission owner should coordinate with other electricity network licensees on the proposals with cross-network implications in order to meet its obligations under Clause 1.

An example of the type of processes that should be considered by Electricity Distributors and transmission owners is where a network user proposes amendments to an existing network planning processes. The amendment(s) has the potential to lead to a whole electricity system outcome through an efficiency improvement. The efficiency improvement would be of benefit to the Electricity Distributor or transmission owner directly, and could also benefit other electricity network licensees, either by them implementing the process improvement, or from the process outcome itself. The proposal should be fully considered, if it can demonstrate that it will advance the efficient and economical operation of the network; not solely optimise a third party's business position.

While the licence condition does not place an obligation to engage with non-users of their network, for the avoidance of doubt, it does not restrict Electricity Distributors and transmission owners from engaging with third parties who are able to support or contribute efficient whole system outcomes where they are not an Electricity Distributor's or transmission owner's network user.

Clause [D17.4]~[7A.4] (clause 3)

[D17.4]~[7A.4] The licensee must use all reasonable endeavours to implement actions and processes identified and proposed through coordination under paragraphs [D17.2 or D17.3]~[7A.2 or 7A.3] of this condition that:

- (a) will not negatively impact its network; and**
- (b) are in the interest of the efficient and economical operation of the Total System.**

This condition applies where processes or actions have been identified through Clauses 1 and 2. Where the change meets both criteria contained in Sub-clauses (a) and (b), there is an obligation on the Electricity Distributors and transmission owners to use all reasonable endeavours to implement it. This is a quantified obligation to account for the fact that there may be proposals that could meet the test but it is justifiable not to implement them. Situations that may make it unjustifiable to implement a solution include proposals with an exceptionally high level of complexity to implement or those that require significant ongoing risk or expenditure to maintain.

Accordingly, where a proposed action negatively affects the operation of its network (and therefore their network's customers) or does not advance the efficient and economic operation of the Electricity System, the Electricity Distributors and transmission owners are not obligated to take further action.

There may be instances where a proposed network solution results in increased financial expenditure for a particular network, but nevertheless promises to yield a financial benefit for the electricity system as a whole. Achievement of this type of whole electricity system outcome may be facilitated through remuneration transfers between affected electricity network licensees. We expect electricity network licensees to determine the appropriate transfer mechanism for the circumstance.

For example, through coordination during planning phases, network licensee A identifies an opportunity to mitigate an issue on their network through work being undertaken on another network operated by network licensee B. Network licensee A requests network licensee B to provide cost estimate data for the work, which they cooperate with. The cost estimate shows that it is less expensive if network licensee B carries out the work than if network licensee A attempts to solve the issue by action on its own network only. As there are additional costs for network licensee B's network from the work, the network licensees agree appropriate remuneration that represents fair value for both sets of networks customers. This results in the total cost of the network being lower than it otherwise would have been and each networks' customers receiving benefits.

4. Part B: Demonstrating compliance with whole electricity system obligations

Coordination register

- [D17.5]~[7A.5]** The licensee must prepare and is required to publish on its Website a Coordination Register demonstrating the steps it has taken to comply with Part A of this condition by [*date being 12 months from date the condition coming into force*].
- [D17.6]~[7A.6]** The licensee must keep up to date and is required to publish its Coordination Register (as updated) on its Website at least once every twelve months from the date of initial publication on [*date 12 months from, ibid*].

To comply with the Whole Electricity System Licence Condition, the Electricity Distributors and transmission owners must publish a Coordination Register within the first twelve months of the condition becoming operative, and thereafter must publish an updated Coordination Register *at least* once in every twelve-month period from the date of the initial publication. For the avoidance of doubt, updates can be more frequent than once a year.

The purpose of the Coordination Register is for the Electricity Distributors and transmission owners to clearly and transparently demonstrate the process it has undertaken to coordinate and cooperate with other electricity network licensees, and to consider proposals from systems users which seek to advance the efficient and economical operation of its network. This will allow other electricity network licensees and users to understand what opportunities have been identified and learn from them, advancing the industry's understanding of the possibilities across a broad range of scenarios. The Coordination Register should be evidence based, and detail active and completed actions, rather than forthcoming actions.

Information to be included in any Coordination Register (or update thereto) comprises:

- Details of all relevant coordination and cooperation activities completed with other electricity network licensees during a relevant period to develop whole electricity systems outcomes, including data sharing.

- Details of any actions or processes that have been implemented (or are being implemented) as a result of coordination and cooperation activities completed with other electricity network licensees. As well as a concise and clear summary of actions or processes not deemed to be apt for implementation, including the reason(s) for that decision.
- Details of all proposals received during a relevant period from system users to advance the efficient and economical operation of Electricity Distributors' and/or transmission owners' networks.
- Details of any system user proposals that have been implemented (or are being implemented). As well as a concise and clear summary of proposals not deemed to be apt for implementation, including the reason(s) for that decision.

The Coordination Register should inform its reader about the whole electricity system actions Electricity Distributors and transmission owners have considered and taken. The reader should be able to clearly understand the justifications given for approving or rejecting proposals from other electricity network licensees and systems users; being those which seek to advance the efficient and economical operation of its network in isolation or in combination with other electricity network licensees.

The Coordination Register should be published on Electricity Distributors' and transmission owners' websites in a discoverable place, and its format should meet modern expectation for data sharing (such as portability, machine readable, easily discoverable searchable and understandable information). For the avoidance of doubt, the register does not require prior Ofgem approval. However, we expect Electricity Distributors and transmission owners to enable system users to provide feedback on the content and format of the register.

Electricity Distributors and transmission owners should retain data on proposals brought forward by network users in a secure fashion. The publication of the Coordination Register, and the handling of network user proposal data, should be managed in accordance with General Data Protection Regulations (GDPR).⁴ Electricity Distributors and transmission owners

⁴ <https://ico.org.uk/for-organisations/guide-to-data-protection/guide-to-the-general-data-protection-regulation-gdpr/>

should retain proposals and associated data for a period of five years, after which it should be permanently deleted.

Network users may opt to remove identifiable information for publication in the coordination register. The responsibility for requesting the removal of identifiable information lies with the network users, and must be made clear to Electricity Distributors and transmission owners.