

Company Directive

Parent Directive DSO issue 4

Distribution System Operator Policy

Summary

This is the Parent Directive for the Distribution System Operator (DSO) policy series. This series covers the activities of the Distribution System Operator (DSO), and its interactions with the Distribution Network Operator (DNO). This directive sets requirements for the DSO series and general requirements for the activities of the DSO and how it interacts with the DNO.

Author: Stephen Quinn

Implementation Date: January 2026

Approved by



Cathy McClay

Managing Director of Distribution System Operator

Date: 13/01/2026

Target Staff Group	DSO staff and those DNO staff who interact with the DSO or make decisions that affect the DSO.
Impact of Change	Amber (minor update): minor changes to the management of the DSO policy series
Planned Assurance checks	To be reviewed by as part of Second Line Business Assurance of DSO governance

NOTE: The current version of this document is stored in the NGED Corporate Information Database. Any other copy in electronic or printed format may be out of date. Copyright 2026 National Grid Electricity Distribution

IMPLEMENTATION PLAN

Introduction

This is the Parent Directive for the Distribution System Operator (DSO) policy series. This series covers the activities of the Distribution System Operator (DSO), and its interactions with the Distribution Network Operator (DNO). This directive sets requirements for the DSO series and general requirements for the activities of the DSO and how it interacts with the DNO.

Main Changes

- Updated consultation requirements for the DSO policy series:
 - DSO Standard Technique consultations extended to managers of teams that:
 - Do other processes that provide inputs to or receive outputs from the processes in the Standard Technique; or
 - Provide specialist software and systems required for the processes in the Standard Technique
 - Delegated authority to set consultation period to the authoriser of the directive under consultation
 - Consultation no longer required for editorial updates that do not materially change company policy or process
- Review and Feedback Arrangements section replaced with reference to new Change Management process
- DSO Enterprise Risk Management section simplified to refer to group and NGED requirements without repeating them
- Content duplicated by Policy Directive DSO1 summarised or removed in DSO-DNO **Conflict of Interest** Risk Management section
- Level 1 processes updated following process mapping and documentation across the DSO
- New Interpretation and Application subsections in Introduction
- Added further information about the DSO policy series
- General editorial updates including:
 - New DSO logo
 - Revised terminology for clarity and consistency with other documents

Impact of Changes

Target Staff Group	DSO staff and those DNO staff who interact with the DSO or make decisions that affect the DSO.
Impact of Change	Amber (minor update): minor changes to the management of the DSO policy series

Implementation Actions

The author made a presentation with voiceovers explaining the major changes from issue 2 to issue 3; it can be viewed [here](#). The minor changes to the management of the DSO policy series from issue 3 to issue 4 will be implemented by the DSO Policy team.

Implementation Timetable

To be implemented from date of issue.

REVISION HISTORY

DOCUMENT REVISION & REVIEW TABLE			
Issue	Date	Comments	Author
4	13/01/2026	<ul style="list-style-type: none"> Updated consultation requirements for the DSO policy series Review and Feedback arrangements section replaced with reference to new Change Management process DSO Enterprise Risk Management section simplified to refer to group and NGED requirements without repeating them Content duplicated by Policy Directive DSO1 summarised or removed in DSO-DNO Conflict of Interest Risk Management section Level 1 processes updated following process mapping and documentation across the DSO New Interpretation and Application subsections in Introduction Added further information about the DSO policy series General editorial updates 	Stephen Quinn
3	05/11/2024	<ul style="list-style-type: none"> Roles updated to reflect recent organisational changes including the Managing Director of DSO Risk Management section updated to integrate with other NGED processes Functional Separation section added, including General Conflict-Resolution Framework Research and Introduction of New Technology section removed General editorial updates including DSO logo 	Stephen Quinn
2	13/03/2024	<ul style="list-style-type: none"> Update consultation requirements in 2.1.3 to reflect recent company reorganisation Update source of DSO Roles in 3.0 New section 4.0 referencing conflict of interest risk 	Stephen Quinn
1	02/06/2023	Review and addition of informative Appendix A: DSO Policy Roadmap.	Stephen Quinn
0	24/11/2022	Initial issue of PAD: DSO	Stephen Quinn

CONTENTS

Implementation Plan	2
Revision History	4
Contents	5
1.0 Introduction.....	6
2.0 The DSO Policy Series	8
3.0 DSO Enterprise Risk Management	10
4.0 DSO-DNO Conflict of Interest Risk Management.....	11
5.0 Level 1 DSO Processes	13
APPENDIX A: Glossary	23
APPENDIX B: DSO Policy Roadmap	25
APPENDIX C: Superseded documentation	25
APPENDIX D: Keywords.....	25

1.0 INTRODUCTION

1.1 Scope

This is the Parent Directive for the Distribution System Operator (DSO) policy series. The DSO series covers the activities of the Distribution System Operator (DSO), and its interface with the Distribution Network Operator (DNO).

The DSO carries out the following Level 1 processes:

- Core processes that deliver the DSO Roles set by Ofgem¹ as part of the DSO incentive in RIIO-ED2:
 - Planning and Network Development, described in section 5.1.1 with further requirements in Policy Directive DSO4
 - Network Operation, described in section 5.1.2 with further requirements in Policy Directive DSO7
 - Market Development, described in section 5.1.3 with further requirements in Policy Directive DSO5
- Supporting processes that enable delivery of the DSO Roles:
 - Transmission-Distribution Interface Coordination, described in section 5.2.1 with further requirements in Policy Directive DSO6
 - Provision of System **Models** & Data, described in section 5.2.2 with further requirements in Policy Directive DSO3
 - **Functional Separation** of DSO from DNO, described in section 5.2.3 with further requirements in Policy Directive DSO1.

Info: Plans for expanding and updating the DSO series can be found in APPENDIX B:DSO Policy Roadmap.

The DSO series is complementary to the other series of NGED policy; these series also apply to the activities of the Distribution System Operator where relevant.

1.2 Interpretation

Where the term “should” is used in this directive it means the provision is a recommendation, which is normally followed. The term “may” is used to express permission. Where the term “shall” or “must” is used in this document it means the provision is mandatory, which must be followed.

Info: Explanatory information is given in blue-outlined boxes adjacent to some provisions of this directive. The explanatory information neither expresses permission nor sets mandatory requirements.

¹ *Distribution System Operation Incentive Governance Document, 17 February 2023*

Technical terms shown in **bold** are defined in the DSO Glossary, available internally at <https://sharepoint.westernpower.co.uk/sites/wpd/dso/public/Lists/DSO%20Glossary>. An excerpt of relevant terms from the DSO Glossary is included here as appendix A.

References to processes and other proper nouns are shown in Title Case (i.e. first letter of each word capitalised).

1.3 Application

If you encounter any difficulty in applying this directive, in the first instance please contact:

- The DSO's Head of Regulation & Governance with questions about subject matter and content.
- The DSO Policy team with questions about editorial matters and issues to be addressed in a future revision. Their group inbox is nged.dsopolicy@nationalgrid.co.uk.

If the Head of Regulation & Governance and the DSO Policy team are unable to resolve your issue, the authoriser of this directive may approve a variation.

2.0 THE DSO POLICY SERIES

One of the control measures that NGED has put in place to support **functional separation** of DSO from DNO (see section 4.2 below) is Decision-Making Frameworks. High-level working arrangements are evidenced in the [DSO-DNO Functional Separation Arrangement](#).

The DSO policy series sets requirements for the processes followed by the DSO to implement the DSO roles. It has a three-level hierarchy of directives that document these processes in more detail at each level:

Process Level	Directive Type	Key content
Level 1 processes	Parent Directive	Why processes exist and who is involved in them
Level 2 processes	Policy Directive	What is required from processes
Level 3 processes	Standard Technique	How people do processes
	Specification	Requirements for systems

The level 1 processes are set in section 5.0 below.

2.1 Roles

2.1.1 Authorising and Accountable

The Managing Director of DSO is the authoriser of this Parent Directive. They hold the authority to approve the issue, amendment, and withdrawal of directives in the DSO series.

Info: Each Policy Directive in the DSO series delegates authority to approve the issue, amendment, and withdrawal of related Standard Techniques and Specifications to the Head of the relevant department of the DSO.

2.1.2 Responsible

The Senior DSO Policy Engineer is responsible for maintenance and coordination of the DSO series on behalf of the Head of DSO Regulation & Governance.

2.1.3 Consulted

Drafts of new or materially amended directives in the DSO series shall be sent to the following nominated consultees for comment:

1. Managers as appropriate to the type of directive:

- a. Parent Directive or Policy Directive: members of the President of NGED's executive team, who may delegate their role as consultee within their directorate.
- b. Standard Technique: the managers of teams that:
 - i. Are assigned tasks by the Standard Technique;
 - ii. Do other processes that provide inputs to or receive outputs from the processes in the Standard Technique; or
 - iii. Provide specialist software and systems required for the processes in the Standard Technique.
- c. Specification: the managers of teams that create, maintain, or use systems or data that are required to conform to the Specification.

2. The members of the President of NGED's executive team, who may delegate their role as consultee within their directorate.
3. Safety Representatives as listed in Appendix B of Policy Directive GE1.
4. The Senior DSO Policy Engineer, where they are not the author.
5. Any other consultees pertinent to a particular Directive as agreed between the author and the authoriser of the directive.

Where the directive under consultation relates to the interface between the DSO and DNO, particular care should be taken by both author and consultees to ensure that it aligns with the respective duties of the DSO and DNO.

The consultation period shall be two weeks unless otherwise instructed by the authoriser of the directive under consultation.

Consultation is not required for editorial updates to directives that do not materially change company policy or process and so are categorised "Green" by Policy Directive GE1. The consultees nominated above should be given one week's advance notice of each editorial update.

2.1.4 Informed

Authors of directives in the DSO series shall identify the Target Staff Group and communicate changes to them in accordance with Policy Directive GE1.

Policy Directive GE1 (The Management of Company Directives) makes compliance with company directives mandatory.²

2.2 Change Management

Directives in the DSO series shall be reviewed and updated in accordance with change management processes set by the DSO's Head of Regulation & Governance.

Info: The Head of Regulation & Governance is planning to formalise these change management processes in a Standard Technique as part of the DSO1 series (**Functional Separation of DSO from DNO**) in due course.

Clause 7.2 of Policy Directive GE1 issue 12, which is current at the time of writing²

3.0 DSO ENTERPRISE RISK MANAGEMENT

To anticipate and respond to threats and opportunities regarding the successful delivery of the DSO's objectives, the DSO shall record and actively manage its risks. This shall be done in compliance with:

1. National Grid Group's Business Management System standard on Enterprise Risk Management & Assurance; and
2. Additional guidance or requirements from NGED's Regulatory Compliance and Risk & Controls departments.

The DSO's risks are recorded in GRC Archer, National Grid Group's single shared risk platform.

4.0 DSO-DNO CONFLICT OF INTEREST RISK MANAGEMENT

4.1 DSO-DNO Conflict of Interest

Ofgem has acknowledged in Baseline Expectation 3.2.5³ that by embedding DSOs within electricity distribution licensees, there is a risk that actual or perceived conflicts might arise between:

- The DNO interests that an electricity distribution licensee has as a result of its legislative and regulatory obligations, and regulatory incentives other than the DSO Incentive; and
- The DSO interests that have been assigned to that electricity distribution licensee by Ofgem through the DSO Incentive Governance Document.

If a **conflict of interest** between DSO and DNO is not suitably addressed, it might impede delivery of the DSO Roles and/or compliance with NGED's obligations.

Section 2 of Policy Directive DSO1, **Functional Separation of DSO from DNO**, explores the conflict-of-interest risk in detail, including:

- The regulatory framework for DSO.
- The shared and specific interests of DSO and DNO.
- NGED's working definition of **conflict of interest** for the DSO-DNO relationship.
- Examples of actual and perceived **conflict of interest**.

4.2 Functional Separation of DSO from DNO

To mitigate the risk of DSO-DNO conflict-of-interest, NGED has adopted a **model of functional separation** between DSO and DNO. **Functional separation** is defined by NGED as:

Having an electricity distribution licensee structured as a single business comprising both DSO and DNO roles, but with the DSO roles conducted by a dedicated DSO directorate within the business. The rest of the business retains the DNO roles together with shared functions. The DSO directorate, in consultation with the rest of the business, designs control measures to manage the risk that the interests of these two roles conflict with each other. The whole business applies these control measures.

Functional separation is not legal separation, so does not require or entail separate licences, separate registered companies, separate offices, or separate support functions such as Finance or Information Technology & Data.

Section 3 of Policy Directive DSO1, **Functional Separation of DSO from DNO**, explains **functional separation** in more detail, including:

- Why it was selected.
- The implications for each part of NGED.
- The actions being taken by NGED to implement it.

³ Baseline Expectation 3.2.5 is part of DSO Role 3, Market Development; see *Distribution System Operation Incentive Governance Document*, 17 February 2023

4.3 Control Measures for Functional Separation

NGED has put in place several control measures to support **functional separation** in mitigating conflict-of-interest risks between DSO and DNO:

Control Measure	Related provision of Baseline Expectation 3.2.5
Organisation Structure	<i>“At a minimum, this should include demonstrable executive-level accountability and board-level visibility of key DSO decisions across the planning, operation and market facilitation functions.”</i>
Decision Making Frameworks	<i>“This should also include clear and separate decision-making frameworks...”</i>
Independent Oversight	Decision-making frameworks should be “ <i>supported by independent oversight, such as external auditing, to promote transparency and enable scrutiny.</i> ”
Conflict-of-Interest Identification	to address the term “ <i>identify</i> ” in the provision “ <i>DNOs to introduce other proportionate measures, developed with robust stakeholder engagement, to <u>identify</u> and address actual and perceived conflicts between its DSO and network ownership roles or other business interests.</i> ”
Conflict Resolution Framework	–
Finance	–
Data and Information	–
Branding and Identity	–

Each of these is detailed in section 4 of Policy Directive DSO1, **Functional Separation of DSO from DNO**.

5.0 LEVEL 1 DSO PROCESSES

The DSO does the following level 1 processes:

- Core processes that deliver the DSO Roles set by Ofgem⁴ as part of the DSO incentive in RIIO-ED2:
 - Planning and Network Development
 - Network Operation
 - Market Development

Info: The DSO Roles are subdivided into DSO Activities, which in turn are subdivided into Baseline Expectations.

- Supporting processes that enable delivery of the DSO Roles:
 - Transmission-Distribution Interface Coordination
 - Provision of System **Models & Data**
 - **Functional Separation** of DSO from DNO

These processes are documented at a high-level below. All named parties in both DSO and DNO shall follow these processes.

Each of these processes has a dedicated DSO department. The DSO is also supported by its Strategy, Innovation & Stakeholder department.

5.1 Core Processes

These processes deliver the DSO Roles.

⁴ *Distribution System Operation Incentive Governance Document*, 17 February 2023

5.1.1 Planning and Network Development

DSO Role	Planning and Network Development
Purpose	<p>To:</p> <ul style="list-style-type: none"> • Understand how our customers will use the distribution network into the future and provide insight to the wider business • Direct the general reinforcement activity of NGED by analysing the network and identify future investment requirements
Process owner	Head of System Planning
Core DSO department	System Planning
Other teams crucial to this process	<p>DSO:</p> <ul style="list-style-type: none"> • Flexibility Markets • System Models & Data • Transmission/Distribution Interface <p>DNO:</p> <ul style="list-style-type: none"> • Network Design • Control Centre • Asset Management

Teams that directly use outputs from this process	DSO: <ul style="list-style-type: none"> • Flexibility Markets • DSO Operations • Transmission/Distribution Interface DNO: <ul style="list-style-type: none"> • Network Design • Asset Management • Field Operations (delivery) • Finance • Control Centre • Connections
Policy Directive setting level 2 processes	DSO4, <i>Planning & Network Development</i>

5.1.2 DSO Network Operation

DSO Role	Network Operation
Purpose	<p>To economically optimise use of the available electricity distribution system by:</p> <ul style="list-style-type: none"> • Developing sufficient operational network visibility to identify, forecast and monitor constraints; and • Creating and using efficient and transparent decision-making processes for the dispatch of flexibility services and the management of curtailment.
Process owner	Head of DSO Operations
Core DSO department	DSO Operations
Other teams crucial to this process	<p>DSO:</p> <ul style="list-style-type: none"> • Flexibility Markets • System Models & Data • System Planning <p>DNO:</p> <ul style="list-style-type: none"> • Control Centre • IT&D Critical National Infrastructure
Teams that directly use outputs from this process	<p>DSO:</p> <ul style="list-style-type: none"> • Flexibility Markets <p>DNO:</p> <ul style="list-style-type: none"> • Control Centre
Policy Directive setting level 2 processes	DSO7, <i>DSO Network Operations</i>

5.1.3 Flexibility Market Development

DSO Role	Market Development
Purpose	<p>To:</p> <ul style="list-style-type: none"> • To design, develop and utilise markets for distribution flexibility services to support the reliable and economic management of network risk; and • Engage with market providers to support their participation in such markets.
Process owner	Head of Flexibility Markets
Core DSO department	Flexibility Markets
Other teams crucial to this process	<p>DSO:</p> <ul style="list-style-type: none"> • System Planning • DSO Operations <p>DNO:</p> <ul style="list-style-type: none"> • Network Design
Teams that directly use outputs from this process	<p>DSO:</p> <ul style="list-style-type: none"> • System Planning • DSO Operations
Policy Directive	DSO5, <i>Flexibility Market Development</i>

5.2 Supporting Processes

These processes enable the DSO to deliver the DSO Roles.

5.2.1 Transmission-Distribution Interface Coordination

Purpose	To: <ul style="list-style-type: none">Coordinate the transfer of regulatory and connections-triggered information across the transmission-distribution boundaryWork with ESO to ensure efficient outcomes across the transmission-distribution boundary and communicate this across NGED so customers can be informed
Process owner	Head of Transmission/Distribution Interface
Core DSO department	Transmission/Distribution Interface
Other teams crucial to this process	DSO: <ul style="list-style-type: none">System Models & DataSystem Planning DNO: <ul style="list-style-type: none">Network DesignAsset ManagementConnections
Teams that directly use outputs from this process	DSO: <ul style="list-style-type: none">System Models & DataSystem Planning DNO: <ul style="list-style-type: none">Network DesignConnectionsField Operations (local connections planning)
Policy Directive	DSO6, <i>Transmission-Distribution Interface Coordination</i>

5.2.2 Provision of System **Models & Data**

Purpose	<p>To support DSO, DNO, and external stakeholders by:</p> <ul style="list-style-type: none"> • Developing and maintaining Primary and Secondary offline models of the electricity distribution system from DSO, DNO and external datasets; • Development of analysis tooling and sharing expertise to deliver DSO strategic priorities and embed business efficiencies; • Specialist analysis of the offline models and creation of derived datasets to support regulatory reporting, meet licence obligations for data exchange, and provide network insights.
Process owner	Head of System Models & Data
Core DSO department	System Models & Data

Other teams crucial to this process	<p>DSO:</p> <ul style="list-style-type: none"> • System Planning • Transmission-Distribution Interface • Flexibility Markets <p>DNO:</p> <ul style="list-style-type: none"> • Regulation: <ul style="list-style-type: none"> ◦ Income • Asset Management & Commercial: <ul style="list-style-type: none"> ◦ Asset Management ◦ Engineering Policy • IT&D: <ul style="list-style-type: none"> ◦ Critical National Infrastructure ◦ Data Engineering & Process ◦ Technical Mapping • Field Operations: <ul style="list-style-type: none"> ◦ Control Centre ◦ Local Operations ◦ Network Design ◦ Major Projects
-------------------------------------	--

Teams that directly use outputs from this process	<p>DSO:</p> <ul style="list-style-type: none"> • Flexibility Markets • DSO Operations • System Planning • Transmission-Distribution Interface <p>DNO:</p> <ul style="list-style-type: none"> • Field Operations: <ul style="list-style-type: none"> ◦ Local Operations ◦ Network Design ◦ Control Centre ◦ Major Projects • Regulation: <ul style="list-style-type: none"> ◦ RIIO ED2 ◦ Income • Transformation: <ul style="list-style-type: none"> ◦ Future Capability • Asset Management & Commercial: <ul style="list-style-type: none"> ◦ Asset Management • Corporate Affairs: <ul style="list-style-type: none"> ◦ Website
Policy Directive	DSO3, Electrical Modelling & Analysis

5.2.3 Functional Separation of DSO from DNO

Purpose	To support the DSO's other level 1 processes to mitigate and manage DSO-DNO conflict of interest risk.
Process owner	Head of Regulation & Governance
Core DSO department	Regulation & Governance
Stakeholders of this process	<p>DSO:</p> <ul style="list-style-type: none"> • All teams <p>DNO:</p> <ul style="list-style-type: none"> • Regulation • General Counsel • Finance • IT&D • Corporate Affairs • All teams that interact with DSO via other processes
Policy Directive	DSO1, Functional Separation of DSO from DNO

APPENDIX A: GLOSSARY

The following is an excerpt of the DSO Glossary, which is available internally at <https://sharepoint.westernpower.co.uk/sites/wpd/dso/public/Lists/DSO%20Glossary>.

Term	Definition	Acronym
Analysis	Electrical calculations performed upon a Model	
Conflict of Interest	A set of circumstances that creates a risk that an organisation's ability to apply judgement or act in a role is, or could be, impaired or influenced by another interest. The perception of competing interests, impaired judgement or undue influence can also be considered a conflict.	Col
Constraint	<p>Distribution constraint means any limit on the ability of the licensee's Distribution System, or any part of it, to transmit the power supplied onto the licensee's Distribution System to the location where the demand for that power is situated, such limit arising as a result of any one or more of:</p> <ul style="list-style-type: none"> <li>(a) the need to not exceed the thermal rating of any asset forming part of the licensee's Distribution System; <li>(b) the need to maintain voltages on the licensee's Distribution System; and <li>(c) the need to maintain the transient and dynamic stability of electricity plant, equipment and systems directly or indirectly connected to the licensee's Distribution System and used by the licensee to operate the licensee's electricity <p>distribution system in accordance with the Act, this licence, or any other requirement of law;</p>	
Curtailment	Curtailment means any action taken by the Company to restrict the flow of electricity at the Connection Point, except where that restriction is caused by: (a) an Interruption of the Customer's Supply	
Distribution flexibility service	A commercial agreement between the DSO and a flexibility service provider to change the electrical behaviour of one or more customers.	
Flexibility Service Provider	An organisation intending to provide Distribution Flexibility Services to NGED	
Forecast	A prediction of future events that, in the balance of probabilities, National Grid Electricity Distribution believes will occur	

Term	Definition	Acronym
Functional Separation	Having an electricity distribution licensee structured as a single business comprising both DSO and DNO roles, but with the DSO roles conducted by a dedicated DSO directorate within the business. The rest of the business retains the DNO roles together with shared functions. The DSO directorate, in consultation with the rest of the business, designs control measures to manage the risk that the interests of these two roles conflict with each other. The whole business applies these control measures.	
Model	A representation of the topology, impedance, capabilities and inherent behaviours of an electrical system.	
Offline	(In reference to a Model or Operational Behaviour Schemes) For use outside of the Control Phase	
Primary	(In reference to a Distribution System) The part of the distribution system including and upstream of the switchgear on the lower voltage side of each Primary Substation	
Primary Substation	A substation in which Extra High Voltage (EHV) distribution voltages (132/66/33kV) are stepped down to high voltage (11/6.6kV) levels, for local distribution.	
Reinforcement	...assets installed that add capacity (network or fault level) to the existing shared use Distribution System.	
Secondary	(In reference to a Distribution System) The part of the distribution system including and downstream of the switchgear on the lower voltage side of each Primary Substation	

APPENDIX B: DSO POLICY ROADMAP

The DSO series is being expanded and updated to achieve the aims and objectives of the Parent Directive. The following are due to be issued before the end of March 2026:

- An update to Policy Directive DSO3 expanding on the level 1 process Provision of System **Models & Data** with level 2 processes that set specific requirements.
- An update to Policy Directive DSO7 expanding on the level 1 process Planning and Network Development with level 2 processes that set specific requirements.
- Several Standard Techniques expanding on the DSO's level 2 processes with level 3 processes that tell staff and managers why, when and how to do processes.

The DSO2 series is currently reserved for future use.

APPENDIX C: SUPERSEDED DOCUMENTATION

This directive supersedes Parent Directive DSO issue 3 dated November 2024, which has now been withdrawn.

APPENDIX D: KEYWORDS

DSO, Distribution System Operator, Interface