

Company Directive

PARENT DOCUMENT: DSO/3

Relating to Distribution System Operator Policy

Summary

This is the Parent Directive for the Distribution System Operator (DSO) policy suite. This suite 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 suite and general requirements for the activities of the DSO and how it interacts with the DNO.

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Implementation Date: November 2024

Approved by



Cathy McClay
Managing Director of Distribution System Operator

Date: 5th November 2024

Target Staff Group	DSO staff and those DNO staff who interact with the DSO or make decisions that affect the DSO.
Impact of Change	Blue – formalises general governance processes for interactions between DSO and DNO.
Planned Assurance checks	To be reviewed by as part of Second Line Business Assurance of DSO governance

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IMPLEMENTATION PLAN

Introduction

This is the Parent Directive for the Distribution System Operator (DSO) policy suite. This suite 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 suite and general requirements for the activities of the DSO and how it interacts with the DNO.

Main Changes

- 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

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	Blue – formalises general governance processes for interactions between DSO and DNO.

Implementation Actions

The author has made a presentation with voiceovers explaining the changes, it can be viewed [here](#)

Implementation Timetable

To be implemented from date of issue.

REVISION HISTORY

DOCUMENT REVISION & REVIEW TABLE			
Issue	Date	Comments	Author
3	04/11/2024	<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 0 to reflect recent company reorganisation • Update source of DSO Roles in 3.0 • New section 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

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1.0 SCOPE

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

The DSO carries out the following 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
 - Network Operation, described in section 5.1.2
 - Market Development, described in section 5.1.3
- Supporting processes that enable delivery of the DSO Roles:
 - Transmission-Distribution Interface Coordination, described in section 5.2.1
 - Provision of System Models & Data, described in section 5.2.2.

A list of directives planned to be included in the DSO suite can be found in Appendix A: DSO Policy Roadmap.

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

2.0 THE DSO POLICY SUITE

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 suite.

2.1.2 Responsible

The Senior DSO Policy Engineer is responsible for maintenance and coordination of the DSO suite.

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

2.1.3 Consulted

Drafts of new or amended directives in the DSO suite 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 are assigned tasks by the directive; or
 - c. Specification: the managers of teams that create, maintain or use systems or data that are required to conform to the Specification.
2. Safety Representatives as listed in Appendix B of POL: GE1.
3. The Senior DSO Policy Engineer, where they are not the author.
4. 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 this directive.

2.1.4 Informed

Authors of directives in the DSO suite shall identify the Target Staff Group and communicate changes to them in accordance with POL: GE1.

2.2 Review and Feedback Arrangements

Feedback on directives in the DSO suite shall be directed to the reviewing author. The Senior DSO Policy Engineer shall ensure that directives in the DSO suite are periodically reviewed as set out below with due consideration of feedback received. Periodic reviews may be brought forward if triggered by feedback or changes in regulations or legislation.

The Senior DSO Policy Engineer shall regularly review the conflict-of-interest register to identify potential gaps in policy.

2.2.1 Policy Directives (POLs)

Each Policy Directive (POL) in the DSO suite shall be reviewed no later than one year from its date of issue or last review, whichever is later.

2.2.2 Standard Techniques (STs) and Specifications

Each Policy Directive (POL) in the DSO suite shall set review arrangements for its subordinate directives.

3.0 RISK MANAGEMENT

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

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

3.1 Purpose of the DSO Suite in Risk Management

Policy requirements, processes and specifications to manage any identified DSO risks shall be documented in this DSO suite of directives.

POL: GE1 (*The Management of Company Directives*) makes compliance with company directives mandatory.²

3.2 Risk & Issue Register

The Head of DSO Strategy, Regulation & Governance shall maintain, and regularly review, a risk and issue register for the DSO.

3.3 Risk & Issue Escalation

Any risks and issues within DSO which are seen as significant enough to merit monitoring at the NGED Executive Ethics, Risk and Compliance Committee (ERCC) shall be escalated to this Committee for consideration as a potential Principal Risk.

Escalation may be arranged either directly by the Managing Director of DSO or through the Head of Risk & Controls.

When deciding whether to escalate a risk or issue, the following factors shall be considered:

- impact levels (e.g., whether the financial impacts have reached 'business unit' level on the risk scale) and the potential for NGED-wide impact, or
- where management-level DSO risks or issues are outside appetite and there are concerns around being able to bring them within appetite in a timely manner.

Clause 7.2 of POL:GE1 issue 12, which is current at the time of writing²

3.4 Non-DSO Risks

If the DSO identifies an apparent risk that it does not own, the DSO Strategy, Regulation & Governance team shall notify the Head of Risk & Controls, who shall apply their risk processes.

3.5 Conflict of Interest Risk

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

A key example of such a conflict arises in DSO Role 1, Planning and Network Development. When responding to network constraints, the DNO's interests are generally served by building more network. In contrast, the DSO is expected to also use other options such as flexibility services where it is economic and efficient.

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.

To mitigate this risk, NGED has adopted an approach of functional separation between DSO and DNO. This approach, and the control measures required by it, are detailed in section 0.

3.5.1 Conflict of Interest Identification

Actual and perceived conflicts of interest shall be identified from:

- Those disagreements between DSO and DNO which the General Conflict-Resolution Framework in section 4.7.1 determines to be caused by conflict of interests. It is noted that some but not all such disagreements are caused by conflict of interests;
- Stakeholder engagement; and
- Top-down examination of the interests of DNO and DSO.

The Head of DSO Strategy, Regulation & Governance shall maintain a DSO Conflict of Interest register.

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

4.0 FUNCTIONAL SEPARATION OF DSO AND DNO

NGED has adopted a model of functional separation between DSO and DNO. The DNO and DSO remain a single legal entity operating under common electricity distribution licences, but with a range of control measures in place to manage conflict-of-interest risks. This approach ensures an efficient and effective working relationship between NGED's DNO and DSO functions, which is key to delivering optimal outcomes for consumers. The control measures are detailed in the subsections below.

4.1 Organisational Structure

The DSO has a distinct organisational structure within NGED that is clearly delineated from the DNO. The DSO comprises teams that are responsible for:

- The core processes that deliver the DSO Roles (see section 0); and
- Supporting processes that enable delivery of the DSO Roles (see section 5.2).

All of these DSO teams report up to the Managing Director of DSO, who is a member of NGED's executive leadership structure. No DNO teams report up to the Managing Director of DSO.

4.2 Finance

The DSO is treated as a separate function within the NGED business, and personnel costs of the DSO function are reported separately internally.

The DSO retains the load related expenditure budget for general reinforcement, meaning each scheme requires the DSO's approval before commencing, thereby ensuring that flexibility and other options are fairly assessed against traditional reinforcement by NGED.

4.3 Data and Information

NGED is required by licence to use best endeavours to act in accordance with Ofgem's Data Best Practice Guidance. Mitigation of risks associated with data sensitivities, which includes commercial interests, is part of such best practice and therefore part of NGED's obligations.

4.3.1 Data Access

The DSO shall:

- Protect all DSO data from being edited by the DNO; and
- Protect DSO data from being read by the DNO if it is commercially sensitive or where doing would create a conflict of interest in accordance with section 3.5.1.

These requirements shall be applied:

- During period reviews of data stores required by Policy Directive IT1, *Relating to Computer and Communications Security*; and
- On creation of new data stores.

4.4 Independent Oversight

4.4.1 DSO Panel

NGED has appointed and convened an independent DSO Panel. Its core purpose is to hold NGED to account, adding greater transparency to the DSO incentive decision making process. Accordingly, the panel will perform both 'critical friend' and forward-looking advisory roles to National Grid's DSO, providing constructive challenge to DSO activities and forward plans to ensure these are high quality and reflective of the needs of National Grid DSO's stakeholders. It will have the additional function of reviewing the effectiveness of DSO governance structures to ensure that the DSO is operating independently from the DNO and may recommend improvements to these structures.

The DSO Panel is governed by its own terms of reference, which are available from <https://www.nationalgrid.co.uk/nged-dso-panel>.

4.4.2 Audit & Assurance

The functional separation between DSO and DNO shall be assured in accordance with National Grid Group's Business Management Standard on Enterprise Risk Management & Assurance.

4.5 Innovation and Future Capabilities

The DNO's Future Capability team shall act neutrally between DNO and DSO. The DSO and the Future Capability team should collaborate in areas of mutual interest that would benefit from innovation.

4.6 Branding and Identity

Communications with stakeholders shall indicate, by branding or other suitable means, whether they represent DSO, DNO or NGED as a whole. The purpose of this requirement is to give stakeholders clarity on what part of National Grid they are engaging with.

4.7 Conflict-Resolution

The General Conflict-Resolution Framework in

Figure 1 shall be:

- Complied with when resolving conflicts between DSO and DNO; and
- Conformed to when setting subject-specific conflict-resolution frameworks.

4.7.1 General Conflict-Resolution Framework

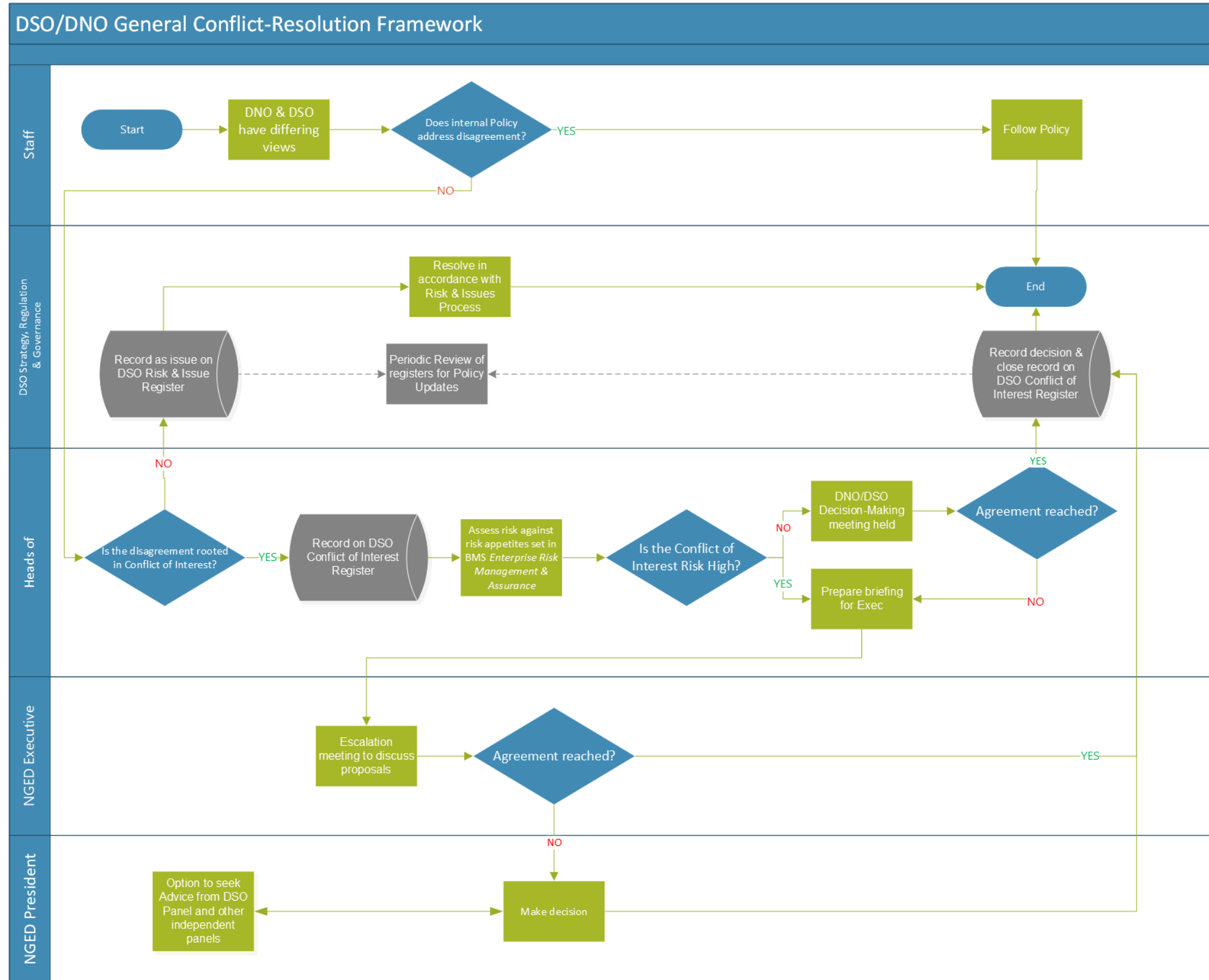


Figure 1: DSO/DNO General Conflict-Resolution Framework

5.0 HIGH-LEVEL DSO PROCESSES

The DSO carries out the following 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

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

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

5.1 Core Processes

These processes deliver the DSO Roles that share their names.

5.1.1 Planning and Network Development

Purpose	<ul style="list-style-type: none">• To understand how our customers will use the distribution network into the future and provide insight to the wider business• To direct the general reinforcement activity of NGED by analysing the network and identify future investment requirements
Process owner	Head of System Planning
Core DSO team	System Planning

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

<p>Other teams crucial to this process</p>	<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
<p>Teams that directly use outputs from this process</p>	<p>DSO:</p> <ul style="list-style-type: none"> • Flexibility Markets • DSO Operations • Transmission/Distribution Interface <p>DNO:</p> <ul style="list-style-type: none"> • Network Design • Asset Management • Field Operations (delivery) • Finance • Control Centre • Connections
<p>Policy Directive</p>	<p>POL:DSO4, <i>Distribution System Planning</i></p>

5.1.2 Network Operation

<p>Purpose</p>	<ul style="list-style-type: none"> • Economically maximise the use of the network as built, optimising for security of supply, network access and system risk • This includes creating and utilising efficient and transparent decision-making processes for the dispatch of flexibility services and the management of curtailment
<p>Process owner</p>	<p>Head of DSO Operations</p>
<p>Core DSO team</p>	<p>DSO Operations</p>
<p>Other teams crucial to this process</p>	<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 • Asset Management • IT&D Critical National Infrastructure
<p>Teams that directly use outputs from this process</p>	<p>DSO:</p> <ul style="list-style-type: none"> • Flexibility Markets • System Models & Data <p>DNO:</p> <ul style="list-style-type: none"> • Control Centre
<p>Policy Directive</p>	<p>POL:DSO7, <i>Distribution System Operations</i></p>

5.1.3 Market Development

Purpose	<ul style="list-style-type: none"> • To design, develop and utilise markets for flexibility services to support the reliable and economic management of network risk • Engaging with market providers to support their participation in such markets
Process owner	Head of Flexibility Markets
Core DSO team	Flexibility Markets
Other teams crucial to this process	DSO: <ul style="list-style-type: none"> • System Planning • DSO Operations DNO: <ul style="list-style-type: none"> • Network Design
Teams that directly use outputs from this process	DSO: <ul style="list-style-type: none"> • System Planning • DSO Operations
Policy Directive	POL:DSO5 (to be issued in due course)

5.2 Supporting Processes

These processes enable the DSO to deliver the DSO Roles.

5.2.1 Transmission-Distribution Interface Coordination

Purpose	<ul style="list-style-type: none"> • Coordinate the transfer of regulatory and connections triggered information across the Transmission and Distribution boundary • Working with ESO to ensure efficient outcomes across the T-D boundary and communicating this across NGED so customers can be informed
Process owner	Head of Transmission/Distribution Interface
Core DSO team	Transmission/Distribution Interface
Other teams crucial to this process	DSO: <ul style="list-style-type: none"> • System Models & Data • System Planning DNO: <ul style="list-style-type: none"> • Network Design • Asset Management • Connections
Teams that directly use outputs from this process	DSO: <ul style="list-style-type: none"> • System Models & Data • System Planning DNO: <ul style="list-style-type: none"> • Network Design • Connections • Field Operations (local connections planning)
Policy Directive	To be determined in due course

5.2.2 Provision of System Models & Data

<p>Purpose</p>	<ul style="list-style-type: none"> • Management of Primary and Secondary offline power system models to support both DSO and DNO • Consumption and validation of DNO data and systems to drive insight and improve system modelling decision making • Development of analysis tooling to deliver DSO strategic priorities and embed business efficiencies
<p>Process owner</p>	<p>Head of System Models & Data</p>
<p>Core DSO team</p>	<p>System Models & Data</p>
<p>Other teams crucial to this process</p>	<p>DSO:</p> <ul style="list-style-type: none"> • System Planning • Transmission/Distribution Interface <p>DNO:</p> <ul style="list-style-type: none"> • IT&D Critical National Infrastructure • Asset Management • Field Operations • Network Design • Records (Mapping/GIS) • Engineering Policy

<p>Teams that directly use outputs from this process</p>	<p>DSO:</p> <ul style="list-style-type: none"> • System Planning • Transmission/Distribution Interface • DSO Operations • Flexibility Markets <p>DNO:</p> <ul style="list-style-type: none"> • IT&D Critical National Infrastructure • Control Centre • Field Operations • Network Design • Asset Management • Income
<p>Policy Directive</p>	<p>POL:DSO3, <i>Electrical Modelling & Analysis</i></p>

APPENDIX A: DSO POLICY ROADMAP

The DSO suite 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 2025:

- A new Policy Directive DSO1 detailing the control measures for functional separation between DSO and DNO.
- An update to Policy Directive DSO4 (*Distribution System Planning*) setting roles and requirements for the subprocesses of the high-level process *Planning and Network Development*.
- A new Policy Directive DSO5 setting roles and requirements for the subprocesses of the high-level process *Market Development*.
- A new Policy Directive DSO6 setting roles and requirements for the subprocesses of the high-level process *Transmission-Distribution Interface Coordination*.

APPENDIX B: SUPERSEDED DOCUMENTATION

This directive supersedes PAD: DSO/2 dated March 2024, which has now been withdrawn.

APPENDIX C: ANCILLARY DOCUMENTATION

None

APPENDIX D: KEYWORDS

DSO, Distribution System Operator, Interface