

# Gap analysis and recommendations for the alignment of contracting processes

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## DOCUMENT CONTROL

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## Introduction

### About ENA

Energy Networks Association (ENA) represents the owners and operators of licenses for the transmission and/or distribution of energy in the UK and Ireland. Our members control and maintain the critical national infrastructure that delivers these vital services into customers' homes and businesses.

ENA's overriding goals are to promote UK and Ireland energy networks ensuring our networks are the safest, most reliable, most efficient and sustainable in the world. We influence decision-makers on issues that are important to our members. These include:

- Regulation and the wider representation in UK, Ireland and the rest of Europe
- Cost-efficient engineering services and related businesses for the benefit of members
- Safety, health and environment across the gas and electricity industries
- The development and deployment of smart technology
- Innovation strategy, reporting and collaboration in GB

As the voice of the energy networks sector, ENA acts as a strategic focus and channel of communication for the industry. We promote interests and good standing of the industry and provide a forum of discussion among company members.

### About Open Networks

Britain's energy landscape is changing, and new smart technologies are changing the way we interact with the energy system. Our Open Networks programme is transforming the way our energy networks operate. New smart technologies are challenging the traditional way we generate, consume and manage electricity, and the energy networks are making sure that these changes benefit everyone.

ENA's Open Networks programme is key to enabling the delivery of Net Zero by:

- opening local flexibility markets to demand response, renewable energy and new low-carbon technology and removing barriers to participation
- providing opportunities for these flexible resources to connect to our networks faster
- opening data to allow these flexible resources to identify the best locations to invest
- delivering efficiencies between the network companies to plan and operate secure efficient networks

We're helping transition to a smart, flexible system that connects large-scale energy generation right down to the solar panels and electric vehicles installed in homes, businesses and communities right across the country. This is often referred to as the smart grid.

The Open Networks programme has brought together the nine electricity grid operators in the UK and Ireland to work together to standardise customer experiences and align processes to make connecting to the networks as easy as possible and bring record amounts of renewable distributed energy resources, like wind and solar panels, to the local electricity grid.

The pace of change Open Networks is delivering is unprecedented in the industry, and to make sure the transformation of the networks becomes a reality, we have created six workstreams under Open Networks to progress the delivery of the smart grid.

### 2022 Open Networks programme Workstreams

- WS1A: Flexibility Services
- WS1B: Whole Electricity System Planning and T/D Data Exchange
- WS2: Customer Information Provision and Connections
- WS3: DSO Transition
- WS4: Whole Energy Systems
- WS5: Communications and Stakeholder Engagement

## Our members and associates

Membership of Energy Networks Association is open to all owners and operators of energy networks in the UK.

- ▶ Companies which operate smaller networks or are licence holders in the islands around the UK and Ireland can be associates of ENA too. This gives them access to the expertise and knowledge available through ENA.
- ▶ Companies and organisations with an interest in the UK transmission and distribution market are now able to directly benefit from the work of ENA through associate status.

### ENA members



### ENA associates

- [Chubu](#)
- [EEA](#)
- [Guernsey Electricity Ltd](#)
- [Heathrow Airport](#)
- [Jersey Electricity](#)
- [Manx Electricity Authority](#)
- [Network Rail](#)
- [TEPCO](#)

## Executive Summary

A key challenge to the alignment of contracts for DNO and ESO services could arise, due to certain misalignments in the procurement and contracting processes for flexibility services across these entities. Gap analysis has been carried out by the Product Team to understand the end-to-end contracting journey and associated procurement processes of each DNO and the ESO. This paper outlines the differences and areas of convergence in contracting journeys and associated procurement processes. In areas where there are differences, such as contract duration, contract award volumes and price determination, these are based on the requirements of the service being procured, individual organisation network needs and legislation requirements. In these cases, there is a desire to align these areas where practical within the procurement process. It is further acknowledged that as the Distribution flexibility service markets become more fluid, the DNOs procurement processes are likely to evolve to shorter timescales, resulting in greater alignment with the ESO.

As a key outcome of the Gap Analysis Exercise, the Product Team recommends that there is some value in looking at the alignment of procurement processes, based on the stated findings. However, this activity does not fall under the current remit of the P4 workstream and is being looked at by the P2 Workstream. The Product Team also recommends progressing the schedule alignment activity that is planned for delivery in 2022.

### 1.3 About WS1A Product 4

#### 1.3.1 Background

The Standard Agreement is a key deliverable from Open Networks that has helped to standardise and simplify the flexibility procurement process. The Standard Agreement for flexibility services was first implemented in April 2020 by all DNOs and further iterations have delivered additional improvements over the years. This product has also set out a view on the evolution of this Agreement and the move towards a framework approach. In March 2021, the product delivered Version 1.2 to address stakeholder feedback on liability, indemnity, and insurance (L, I, & I) elements of the Agreement. Version 2.0 of the Agreement was subsequently released for consultation in Jul 2021 and is the first version to be utilised by both the DNOs and the ESO. This version brought the Agreement another step closer to a framework approach and delivered further simplification, similar to the ESO's suite of services. The introduction of a framework approach allows contracts to be awarded, ranging from day ahead (auction-style) agreements to bilateral contracts. A framework approach essentially enables providers to respond to multiple tenders across a defined period without needing to sign specific contracts each time.

#### 1.3.2 Activity for 2022

The product will provide further iterations and improvements to the Agreement and deliver Version 3. This will include further alignment of format of schedules and documentation. Working closely with ongoing development in the Regional Development Programmes (RDPs), it will also consider the need for tripartite agreements. The product will also seek to expand the product specific schedules across other ESO and DSO products. Additionally, the product will engage with a couple of the respondents to the 2022 scope consultation to further understand and discuss contract specific feedback based on their experiences. The product will also review the outputs of WS1A P5-Primacy rules and identify changes (if any) to the standard agreement that need to be incorporated to ensure applicability of the rules. Any changes identified as part of this will be considered for V3 of the contract. This product will collaborate with WS1A P2 Procurement Process to help develop some of the technical, legal, and regulatory areas identified in the 2021 WS1A P4 Evolution Report.



## 1.4 Purpose of this document

This document is intended to meet the first P4 deliverable for 2022 as detailed in the ON 2022 PID extract below:

Gap analysis and recommendations for alignment on contracting processes	Following a review of the similarities and differences in contracting journeys of network companies (DNOs and the ESO) including contract award processes and contract types (tripartite, bilateral and framework), this deliverable will clearly set out recommendations for alignment across the various aspects of contracting and/or the Standard Agreement, noting future ambitions to move to real time operations.
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## 2 Areas of Convergence

### 2.1 Standard Agreement

Following consultation and approval of Version 2 of the Standard Agreement, the ESO adopted this version of the Standard Agreement for its new suite of Frequency Response Services (Dynamic Moderation and Dynamic Regulation), whilst maintaining its current schedule structure.

The DNOs currently utilise Version 1.2 of the Standard Agreement for their four common active power services (Sustain, Secure, Dynamic, and Restore) and also Reactive services, with a commitment to adopt Version 2 after completion of the schedule alignment activity, which will be completed, as part of the P4 2022 deliverables.

### 2.2 Tendering Windows

Most DNOs operate biannual procurement windows for all their services, whilst also retaining the right to run ad hoc tenders when the need arises. Some DNOs plan a move to shorter term procurement in the next 12 months, notably WPD have recently consulted on their proposed implementation of week-ahead procurement by 2023.

For the ESO, there is a general move towards day ahead procurement, with daily auctions being run for existing services such as Dynamic Containment and STOR. Procurement for the new frequency response services (Dynamic Moderation and Dynamic Regulation) will also be day ahead. Notwithstanding the above, monthly tenders are run for Dynamic and Static FFR, whilst the fast reserve, constraint and system stability products are procured on an ad hoc basis.

### 2.3 Onboarding/Prequalification Platform

All DNOs utilise a form of Dynamic Purchasing System (DPS) to procure their flexibility services. The system is set up to enable providers to complete registration and prequalify for existing and upcoming tenders. Providers

are able to register both planned and existing assets, as constraints are highly locational and therefore providers wish to secure a contract prior to investment.

With regards to the ESO, applicants are able to register to become Service Providers by filling and submitting the Company Registration Form (Form A). Prequalification for specific services is initiated via the submission of Form B and subsequent fulfilment of prequalification criteria. Once the above steps have been completed, the ESO issues Form C, which confirms that the applicant is a registered service provider and accordingly, eligible to participate in the service. The foregoing process is gradually being replaced by the ESO's Single Markets Platform (SMP), which, similar to the DPS, is a portal that allows the Provider register and prequalify assets to participate in the provision of services. The SMP is currently being utilised by providers looking to participate in new Dynamic Regulation and Dynamic Moderation Services. The ESO will also be progressively adopting the platform for prequalification of its existing services.

## 2.4 Competitive Tenders

Procurement of DNO services (including Sustain, Secure, Dynamic, Restore and Reactive) is carried out by competitive tenders, which adopt a range manual and automated assessment processes.

The ESO also runs competitive tenders for the procurement of its existing and new Response and Reserve services including Dynamic Containment, Dynamic FFR, Static FFR, STOR, Dynamic Moderation and Dynamic Regulation. NGESO auctions are mostly run via automated platforms for assessment and bid submission.

## 3 Differences

### 3.1 Contract Duration

Currently, variations exist amongst the DNOs, with some DNOs adopting one year rolling contracts, with a total duration of 5 years and others awarding contracts for longer timescales. For most of the ESO's services, there is a move towards day ahead procurement. Newer services like Dynamic Containment, STOR, Dynamic Moderation and Dynamic Regulation are procured daily, whilst the Static and Dynamic FFR Products (which are being retired imminently) are procured monthly. However, services like Constraint and System Stability are procured on an ad hoc basis.

For both the ESO and DNOs, award duration is based on several factors such as operational requirements, economics and compliance with legislation, which are documented in the procurement processes.

### 3.2 Contract Award Process

The ESO's newer services are procured at EFA block granularity (i.e., every four hours). Hence, each provider can have up to 6 contracts for each unit per day. This results in a significant number of contracts being processed daily, for which manual award processes are unsuitable. For these services, the contract is formed once the auction results are published online. Contracts for some of the ESO's older services like Constraint and Static and Dynamic FFR are awarded via Signed Contract and Award Letter respectively. Whilst the System Stability service which is typically procured on an ad hoc basis, is awarded by instruction.

Amongst the DNOs, the award process is either through signed contracts or, where contracts have been signed ahead of the ITT, by issuing a contract award notice.

### 3.3 Price Determination (Pay-As-Bid Versus Pay-As-Clear)

The mechanism for market pricing varies between DNOs and the ESO, either adopting fixed pricing, pay-as-bid, pay-as-clear, or a combination depending on a liquidity test. Whilst there is a move towards pay-as-clear pricing for the ESO's newer services, pricing for existing services is determined via the pay-as-bid methodology.

Methodologies for calculating value adopted by the DNOs include NPV of deferred reinforcement to determine ceiling cost (using the CEM Tool developed under WS1A P1), cost of alternative generation/ avoided CI and CMLs, and assessment of tendered pricing against investment case.

### 3.4 Contract Award Volumes

Given the procurement granularity of the ESO's newer services, contract volumes per award are in the region of 100- 150 per service. Although the older services are procured less frequently, and tend to cover longer periods (i.e., the Static and Dynamic FFR contracts which are delivered over a period of one month), significant volumes are still awarded for these services, with Dynamic and Static FFR recording approximately 100 and 20-50 contracts per award respectively.

The contract volumes per award for each DNO currently range between 1- 25 per procurement, with higher contract volumes expected in future.

### 3.5 Mix of Manual and Online Platforms for Tender Assessment

Amongst the DNOs and ESO, there is a mix of manual and automated processes for bid submission, whilst the bid assessment process is largely manual. The ESO runs automated bid submission and assessment processes for its new range of services. Some of the older services like Static and Dynamic FFR utilise automated bid submission processes alongside manual assessment processes.

## 4 Moving Forward

It is recognised that greater alignment of procurement processes and practices across the DNOs and ESO is required to support full contractual alignment. The ESO's operational requirement for closer to real time procurement has benefitted from a longer period of implementation, enabling greater evolution and catering towards the more ESO service provision. With both the DNOs and ESO now using the Standard Agreement, incremental steps are certainly being taken towards the adoption of a common approach for the procurement of flexibility services. The following have been identified by DNOs as desirable in the journey towards alignment of procurement processes:

### 4.1 Move to Real-time Procurement

Whilst DNOs and the ESO generally agree on the need to move closer towards real-time procurement (as this is commercially expedient and helps meet operational needs), the wider systems required to support 'closer to real-time' tendering, or 'trading' of services (month ahead, week ahead and day ahead) are still being considered. These steps are being developed through WS1A P2 – Procurement Processes.

## 4.2 Online Contract Award

As the distribution flexibility markets become more fluid and the volume of awarded contracts increase, DNOs recognise the need to implement online contract award processes, to support increased market activity. The ESO will continue with online contract award with the high volume current and future services.

## 4.3 Automated Auction Platforms

Many DNOs and the ESO currently utilise manual bid assessment platforms for some or all of their auctions. Manual processes are time-consuming, have risks associated with manual data handling and are generally unsuitable for mature, high-volume markets. Therefore, a move towards the adoption of automated bid submission and assessment platforms by DNOs may be required to support this, which should be considered by WS1A P1, as work is continuing throughout 2022 to enhance the Common Evaluation Methodology further, to capture the carbon and optionality cost of utilising flexibility services.

## 5 Summary

Following the gap analysis, the Product Team has identified key areas of convergence across the contractual and procurement processes utilised by the DNOs and ESO. Notwithstanding the foregoing, the Standard Agreement takes into account specific organisational requirements. This will be further enhanced when the service-based schedule alignment work is completed in 2022. The use of Version 2 of the Standard Agreement and service-based schedules will allow DNOs and the ESO the flexibility to contract for all existing and new services; it would also allow changes to be made to the procurement process, without the need for wholesale changes to the contractual terms. In areas where there are differences, such as contract duration, contract award volumes and price determination, these are based on the requirements of the service being procured, individual organisation network needs and legislation requirements. In these cases, there is a desire to align these areas where practical within the procurement process.

## 6 Recommendation

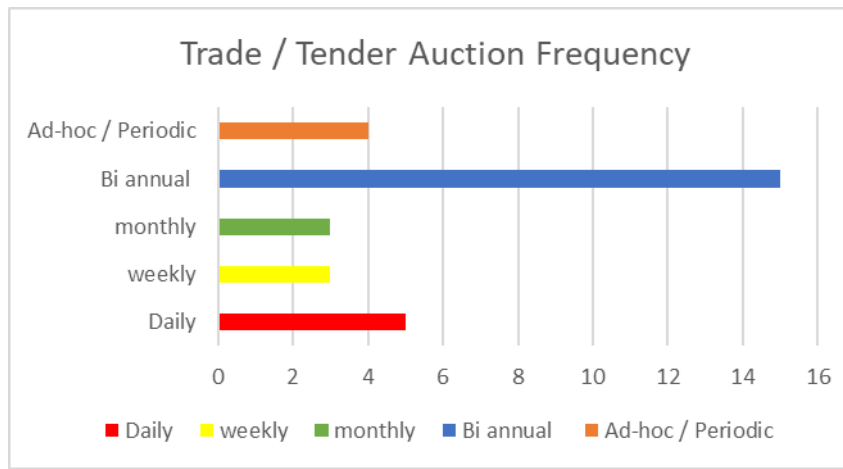
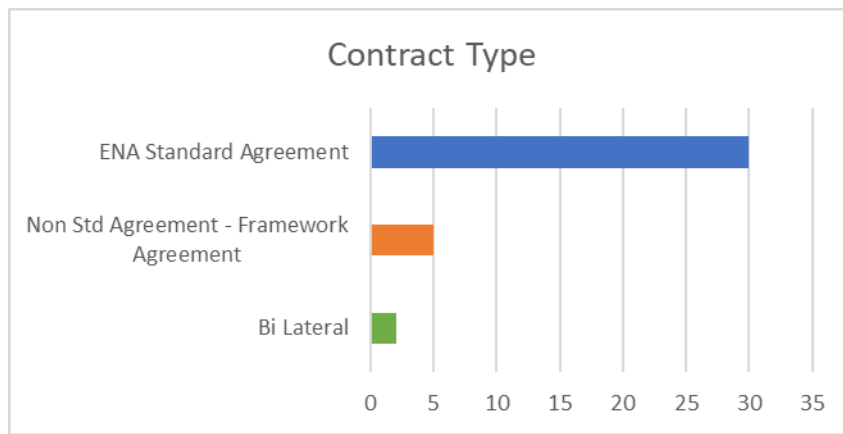
As a key outcome of the Gap Analysis Exercise, the Product Team recommends that there is some value in looking at the alignment of procurement processes, based on the stated findings. However, this activity doesn't fall under the current remit of the P4 workstream. The alignment of procurement processes is being looked at by the P2 Workstream, and the draft P2 Paper recommending steps to move to real-time procurement reflects the same outcome as the findings in this gap analysis.

The findings herein will also feed into the WS1A P0 Workstream. The P4 Workstream also recommends progressing the schedule alignment activity that is currently planned for delivery in 2022.

## Appendices

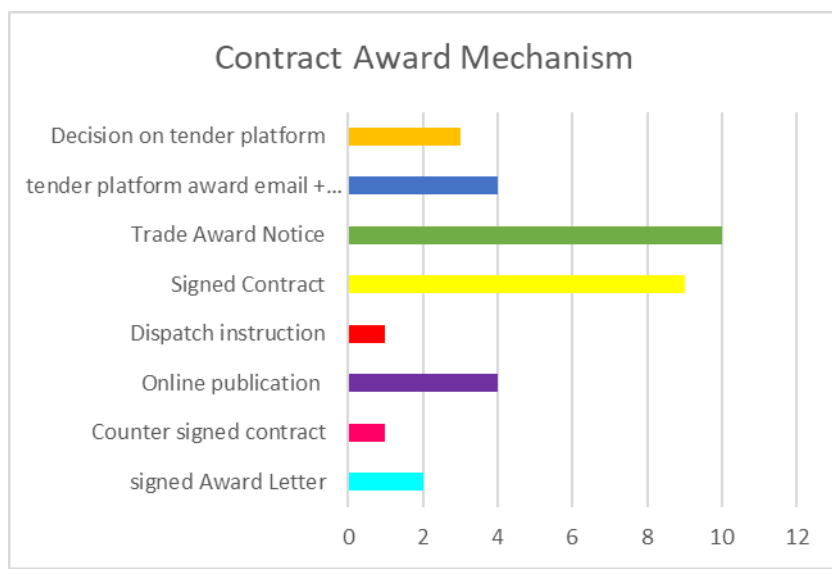
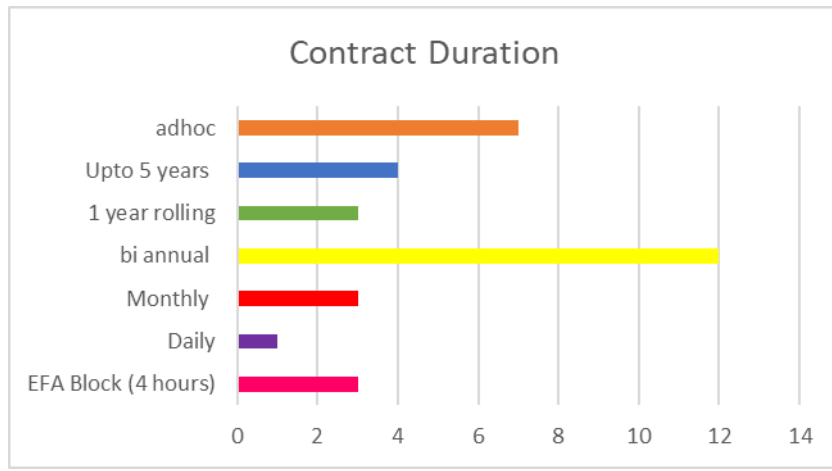
### Appendix 1

#### Graphical Representation of Contracting Processes

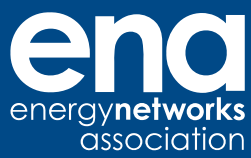


**Open Networks programme – Standard Agreement**

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