

## ANNEX 7: DELIVERY STRATEGY

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## **1.Executive Summary**

We have conducted a review of our delivery strategy to ensure that we can deliver the RIIO-ED1 business plan efficiently. Customer service is at the heart of our delivery strategy for RIIO-ED1. The strategy will achieve significant improvements through changes in the delivery of investment and improved performance in the field. An end-to-end review has enabled us to change how we are organised, optimising service and cost whilst ensuring the delivery of our obligations.

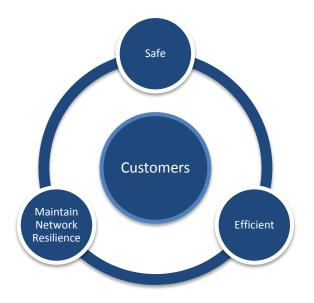
Efficient delivery requires a well-defined programme with clear scopes of work, optimised delivery routes and robust performance management. These conditions have all been achieved in RIIO-ED1. For the entire RIIO-ED1 programme, we have identified the upper quartile levels of efficiency for individual fault types and individual capital programme activities and their sub categories. These upper quartile levels have been used as internal benchmarking targets. For each activity type we have determined a delivery route that achieves the benchmark level or better. We have used a resource analysis tool to determine the optimum levels of resources required in each area. We are implementing several significant performance improvement programmes focussed on improving the productivity, efficiency and service levels of our in-house delivery organisation. The contracting strategy is tailored to fit the delivery model, largely supporting the Capital Programme and contractor delivered elements of our fault response service.

This annex provides an overview of the delivery strategy and resource modelling conducted as part of the business plan development. It also summarises our approach to maintaining flexibility in our resources provision to enable us to react efficiently to different emerging scenarios.

# 2. Delivery Strategy

## 2.1 Customer focussed

Our vision is to be the leading energy delivery business. To achieve this we have focussed on creating a delivery strategy with customer service at its heart. The strategy seeks to achieve significant improvements in performance through changes in the delivery of investment and improved performance in the field. We focus our own direct workforce on key customer activities. Using our own workforce improves the speed of service and ensures the direct control of reactive works. This provides improved performance in the resolution of supply interruptions – our customers' primary concern.



The delivery strategy provides our customers with a safe, reliable and efficient service.

Throughout the delivery chain, from procurement to delivery in the field, we have targeted improved customer service and efficient delivery to ensure value for customers. An end-toend review has enabled us to change how we are organised, optimising service and cost whilst ensuring delivery of our obligations.

### 2.2 Continual improvement

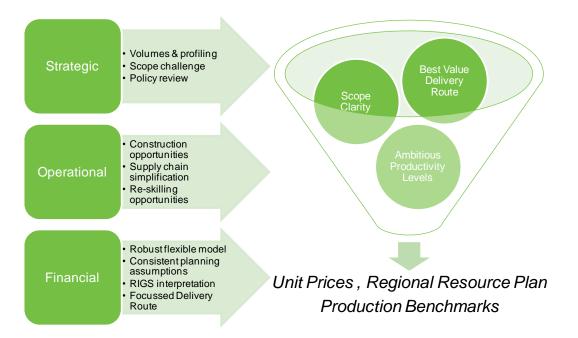
The delivery strategy is focussed on supporting our proposals for RIIO-ED1. The existing delivery model provides a platform on which to build further improvements in customer service, delivery capacity and delivery efficiency.

Significant changes to the delivery model have been embedded within our business over recent years, improving efficiency and operational control. We will continue that development process to generate further improvements in customer service and delivery efficiency.

# 3. Delivery Model

Efficient delivery requires:

- a well-defined programme with clear scopes of work
- optimised delivery routes
- robust performance management



## 3.1 Comprehensive RIIO-ED1 plan

Assessing stakeholder and network needs for RIIO-ED1 has given us a clear view of the volumes and scope of work to be delivered. We have been able to share many insights of the scale and work mix in the RIIO-ED1 programme with our supply chain. This has enabled us to understand the resources available in the market and to market test to determine the most competitive rates available.

## 3.2 Best Value Delivery Route

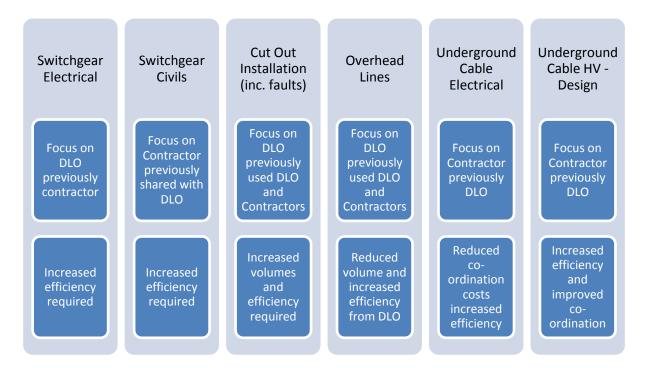
We have identified the upper quartile efficiency levels for individual fault types, individual capital programme unit rates and their sub categories for the entire RIIO-ED1 programme. These upper quartile levels have been used as internal benchmarking targets. For each activity type we have determined a delivery route which ensures that our entire programme can be delivered at upper quartile costs.

For every activity covered by the delivery strategy we have reviewed the options available to us with the simple principles identified in this section and set out graphically overleaf. The model is purposefully simple and effective with clear decision parameters. The key driving principles, established by our strategy, are that our direct labour force will focus on key customer service activities, maintenance works and some network investment work where self delivery is commercially efficient.

Customer Interruptions Response	<ul> <li>Direct Labour Delivery</li> <li>Fastest service delivery option</li> </ul>	
Network Development Delivery	<ul> <li>Direct Labour or Contractor</li> <li>Best economic option</li> </ul>	
Network Maintenance	<ul> <li>Direct Labour or Contractor</li> <li>Best economic option</li> </ul>	
Tree Cutting	<ul><li>Direct Labour</li><li>Best economic option</li></ul>	

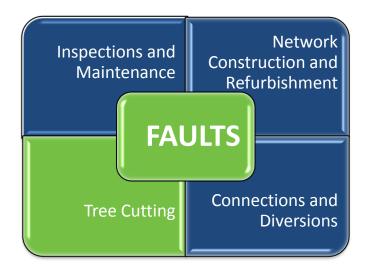
With a clear understanding of forecast activities and work volumes the most appropriate option of direct labour or contractor resource has been selected bearing in mind service levels, volumes of work and costs, and the optimum model identified. Where changes from current practice are required, these will be made in the last two years of DPCR5. This model is being co-ordinated with the workforce renewal programme to deliver an optimised delivery resource structure. The result will successfully combine the benefits of having both direct labour and contractor resources. This process has also targeted a simplified supply chain.

The defined delivery model will offer increased efficiency and improved customer service. There are many changes required to be implemented within the current delivery model to achieve these outcomes. These are summarised below together with explanatory notes where relevant.



Our delivery model strategy retains a core of direct labour for reactive customer work and tree cutting with flexibility provided by contractors for other investment areas. The minimum level of DLO (Direct Labour Organisation) is therefore derived from the level of standby resource needed, the level and types of faults anticipated, volumes of overhead line, plant and cut outs works required, together with maintenance volumes, including tree cutting. There is further detail later in this appendix setting out resource implications. This ensures

security of fault response, retains and secures key skills within Electricity North West and provides efficient cost delivery whilst maintaining flexibility for the business.



#### <u>Faults</u>

Fault response and repair is the cornerstone of the resource plan. This will be resourced using our direct labour force. To calculate the resource requirements for faults we assessed the 24/7 service (minus daily Troublecall) requirements. Troublecall costs were developed through a bottom-up assessment which provided a "base price" for "perfect" faults. This was translated into target prices for the remainder of DPCR5 and RIIO-ED1. Additionally, we will seek to maximise the use of innovative technologies to facilitate fault location and optimise our activities and resources.

#### Tree Cutting

Tree cutting will be delivered by the direct workforce which has already placed Electricity North West in a UQ position when compared to other DNOs. The strategy of in-house delivery has assisted in managing and meeting our customers' expectations, delivering a higher volume of cutting at an efficient cost per span. Tree cutting at EHV can additionally be supported by overhead transmission linesmen.

#### Inspections and Maintenance

Inspections and maintenance delivery is focused on the use of direct labour to deliver technical works, electrical maintenance and protection maintenance (with associated condition inspections). Transmission jointing, oil mechanics and linesmen teams will be resourced to manage faults with productivity maintained by delivering capital works at low fault times.

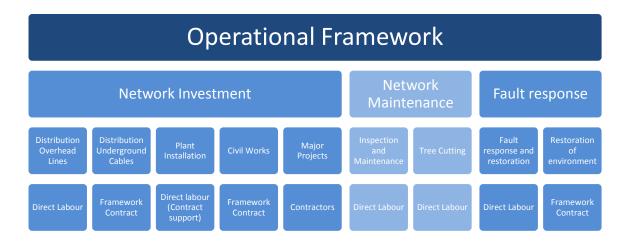
Civil maintenance activities will be delivered through a small in-house management team using specialist framework contractors for ad-hoc repairs and routine activities such as weed and clean, an approach that will help us achieve high levels of cost efficiency.

Specialist civil inspections, tunnels, bridges, asbestos etc will be delivered via subcontractors with appropriate skills and authorisations.

For overhead inspections (Towers & Wood Pole) we have the option to deliver with either direct workforce or contractors allowing flexibility in the programme to improve productivity.

#### Network Construction and Refurbishment

The mix of work between Contractors and direct labour has been optimised using our resource analysis tool. We have established over recent years a robust and efficient delivery framework which, as depicted below, sets out how the available resources are organised.



For high volume activities we have established framework agreement with specialist contractors in their fields. These frameworks set out robust service standards from health, safety, quality, speed of service and cost perspectives. Our tendering and negotiations with contractors ensures competitive cost levels are maintained and delivered through the framework agreements. Framework and tendering arrangements are determined by the type of work, for example major projects will be packaged and individually tendered to secure delivery costs at below framework contract levels. Improved direct labour productivity and focus on key areas of the programme will result in upper quartile unit cost delivery being achieved. More detail is provided in Annex 6 – Procurement Strategy.

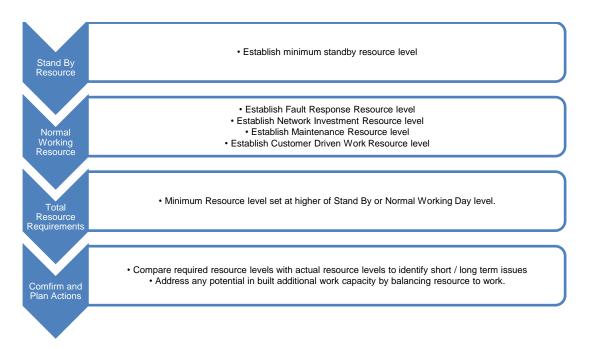
#### 3.3 Delivery Resource Analysis

We have developed a resource analysis tool for our direct delivery teams. This model allows us to compare scenarios based upon the estimated volumes of activity required and the efficiency levels targeted. We have used this tool to determine the optimum levels of resources required in each area of the operational delivery team. We are therefore able to identify and manage required resource levels across the delivery programme. We can also use the tool to assess the impact of any changes or events that occur in the delivery plan on those resource levels.

These resource levels have been compiled following a thorough review of all the following aspects of the delivery activity demands within secondary networks:

- Fault response during normal working hours
- Fault response outside of normal working hours
- Asset replacement activities
- Asset refurbishment activities
- Customer connections delivery requirements
- Customer advice requirements

The resource analysis tool has built in logic that follows the delivery model we have established. In principle the following steps are followed to establish minimum required direct labour resource levels.



This resource modelling allows us to understand and flex our resources through the ED1 period, whilst maintaining the efficiency of the programme of works. This analysis tool allows us to understand the potential consequences of changes in advance and therefore significantly improves the capability of the organisation to flex and manage any challenges encountered along the way. The actual impacts on our resource levels are summarised in section 3.4 below.

### 3.4 DLO Resource Requirements

We are currently forecasting a modest increase in our direct delivery resource levels over the period of RIIO-ED1 (approximately 50 staff). This increase is required to resource the future in-house delivery of cut-out replacement works, primarily associated with smart meter roll-out. There are also changes required to resource specific skill sets, but we will manage this through the retraining and recruitment of staff in DPCR5 and in the early years of RIIO-ED1 to minimise any overall impact.

We have also identified a number of retraining and up skilling requirements to support key project areas including:

- Training jointers to carry out fitting duties associated with plant projects
- Training linesmen to collect quality inspection data
- Multi skilling linesmen to support out of hours jointing stand-by provision in some areas

The table below highlights the projected changes in staff numbers for secondary network delivery. This is the key area for the efficient utilisation of our direct delivery resource. As the plans are developed, there may be modifications resulting from the network investment programme designs and actual fault numbers. We will look to introduce multi-skilling of jointers to mitigate the increase forecast in fitters and train linesmen to collect network data to support a more efficient end-to-end process. At present, there are no significant changes in delivery staff skills or overall resource volumes anticipated. This base level requirement

is then fed into our training and workforce renewal programme which factors in the impact of an aging workforce.

Trade or Skill	Forecast Resource	Current Resource	Comment				
Engineer	102	92	Support peak requirements with Contractor				
Fault Technician	47	47	Seeking to improve fault response service level				
Electrical Jointer	180	184	Potential retraining as fitter.				
Overhead Linesman	108	108	Reduction in contractor support				
Fitter	26	13	Support peak requirements with Contractor				
Cut-out Jointer	49	0	Dependent on Smart Meter driven volumes				
Total	541	479	Main driver is increase in cut out jointers				

### 3.5 Contractor Strategy

The overall Contractor Strategy is designed to map onto the operational delivery framework set out earlier in this Annex.

In reviewing our contractor delivery structure moving into DPCR5 we moved away from large partnering style contractor contracts, which were shared with United Utilities. We reviewed the works we require and moved to Tier 2 delivery contractors who had the capability to deliver the works largely with their own resources within their areas of business expertise. This movement resulted in a small increase in the number of contractors being employed in delivery; however it has reduced the levels of contractor margin and the associated overhead costs incurred. The change also further reduced the management chain to the contractor field force, improving the speed of management control.

This innovative and simple structure has been very successful in delivering reduced contractor costs and in providing resource to the business. We therefore have proposed to continue this delivery structure into RIIO-ED1. The contract structure is designed to reflect the actual resources available in the market with key frameworks for excavation and lay, overhead line and civil works being put in place. Major projects have been procured separately from the market and have continued to provide additional efficient delivery resource to the business. We may also look to implement a Rising Lateral Mains framework contract in due course, following clarity of volumes and programmes of work, if we consider this will offer commercial or service level benefits.

The overall contracting strategy and structure is shown on the graphic below. The previous transition from major framework suppliers to elemental activity frameworks is also indicated below. We have indicated where existing contractors are in place and where this arrangement may be extended or replaced by other contractors, if we consider improved service or lower costs may be obtainable. The graphic also indicates where we will seek to tender contracts for future works within RIIO–ED1. These replacement timings are intended to be staggered through the programme period to allow the Procurement Team resources to address them individually, minimizing team resource levels needed and allowing team focus on the services being sought. This also minimizes contractor delivery risk by staggering contractor replacement through the period rather than having a major change of all contractors at the same time.

The graphic overleaf terminates notionally at 2025 for illustration purposes. In reality all contracts to be let will be considered individually and may continue beyond this date. Individual contracts will be set at contracts lengths determined to suit several factors, including: being of sufficient length to be attractive to the contractor market encouraging competitive tendering, protection of continuous service over a period of years allowing, security of service, improved service and efficient operations to be developed, options on

length of contractor (extension periods) may be incorporated to build in flexibility of period to allow for external market changes, end of contract if service levels are not acceptable, and also to allow overlapping periods of contracts to reduce impact of several contractors changing at the same point of time.

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	
Programme Manager	U	nited Utilit	ies						Electricity North West										
Contractor Delivery Manager	Frame	work Cont	ractors		Electricity North West														
			Contract			Contract 1			Extension of existing or replacement contractor						Tender Contract Award Process				
Excavate and Lay					Contract 2	!	Cont	ract 2	Extension or Replacement of existing Contractor				Tender Contract Award Process						
Works							Cont	ract 3	Extension or Replacement of existing Contractor					Tender Contract Award Process					
				Direct Labour Delivery															
				Contract 1				Extensio	Extension of existing or replacement contractor					Tender Contract Award Process					
Overhead Line				Contract 2 Contract 2				of existing contractor					r Contract Award Process						
Works							Extension or Contract 3 replacement of Tender Contract Award Process existing contractor												
				Direct Labour Delivery															
				Contract 1				Extension of existing or replacement contractor					Tender Contract Award Process				5		
Plant Works				Contr				Extension of existing or replace contractor					Tender Contract Award Process				cess		
					Direct Labour Delivery														
Civil Works				Contract 1					Extension of existing or replacement contractor					Tender Contract Award Process					
					Contract 1 Extension of existing or replacement contractor						ontractor	Tender Contract Award Process							
Generator Works				Direct Labour Delivery															

### 3.6 On-going DLO Performance Management

Through the regulatory periods of DPCR4 and DPCR5 there has already been considerable change undertaken within our delivery model. This has resulted in significant improvements in delivery capacity, customer service and reductions in cost of delivery. The improvements already implemented have been further refined and developed into our RIIO-ED1 proposals and the overall philosophy followed remains the same.

We are implementing several significant performance improvement programmes focussed on improving the productivity, efficiency and service levels of our own in house delivery organisation. Examples of the initiatives and projects already underway to improve our efficiency levels include the following;

- 1. Front line management effectiveness; improving delivery team performance
- 2. Simplified delivery routes; allowing clarity of performance data for delivery route
- Management information improvement; allowing closer and faster output management
- 4. Fault response improvement programme; targeting reduced cost and faster delivery
- 5. Optimized delivery route options; commercially most advantageous option
- 6. Scheduling process improvements programme; increasing team productivity

## 3.7 Delivery Resource Flexibility

We have considered the need to build into the delivery plan the ability to flex resource availability, providing security of resource provision whilst maintaining efficient delivery. These key factors require careful balancing as they are often in conflict with each other. As a result the Secondary Network Delivery model is based on utilising the current direct labour resources largely in their current form, with more focus on customer reactive and maintenance works. A small increase in resource over the RIIO-ED1 period is required to undertake the additional work needed by the smart meter initiative. The balance of work will be completed by external contractors, procured through either framework arrangements, or for larger projects, via a formalised tender. The approach of undertaking the additional volume by utilising external contractors is appropriate as we anticipate there will be sufficient flexibility in the market at the commencement of the price control period.

Within the Major Projects arena we have set out to deliver these through individually tendered projects. This provides additional resources at highly efficient cost levels with an ability to flex resource levels up or down at relatively short notice in line with planned projects. Our only area of concern is that some specialist resources may become limited in a stretched market and as a consequence command a premium price. It is therefore essential that we continue to monitor the market to determine if this scenario is developing. If necessary we will initiate further procurement activity, to secure the appropriate contracting resource to ensure we continue to deliver in line with the business demands.

We have also considered the potential requirement to deliver significant project support to the Regional Nuclear Programme. The intention here would be to form a specific ENWL project team to manage the design, programming, health, safety, quality and programme of the works. We would contract the works to appropriate major electrical and engineering contractors as required by the project demands. The required works and programme will be considered in detail in due course as there are several contracting models that may be appropriate. This method of planning and delivery will provide the opportunity to deliver the project on time and cost whilst minimising any impact to the normal operations of the business.