

# Annex 7.1

## DELIVERY STRATEGY

### Introduction

#### Delivering on decarbonisation is the key driver of our delivery strategy for 2023-28

Our plan sets out what we will do in 2023-28 to maintain and improve the essential service we provide for customers, and to facilitate decarbonisation – one of the most significant transformations in our business for decades. To do this, we have set out our plans to spend £456m per annum, 44 per cent more than what we are investing in the 2015-23 period.

Our current delivery model has served us well, enabling us to successfully deliver our largest ever capital investment programme over the period 2010-15 and keeping us on-track to deliver our 2015-23 commitments, including upgrading our network to be smarter and more active. We have a proven track record of delivering necessary investment at industry-leading cost efficiency levels and successfully adapting our plans and delivery models to manage risks. This past performance demonstrates the strength of our delivery capabilities.

We have prepared our draft plan for 2023-28 against a very different landscape to that of its predecessors. The decarbonisation agenda, significant developments in technology, what our customers expect from us in a society with an ever-greater dependence on electricity, and a shift in attitudes towards what existing and prospective employees expect from their employer, mean that today's plans need a programme for transformational change, not just an incremental build on what we do today. A high level assessment of the impact, relative to our current levels of performance, is shown in table 1. Clearly the level of ambition represented by our plan involves a significant amount of change not only on decarbonisation but across almost every area of our plan. In preparing this plan we have highlighted six particularly significant enabling areas that are essential to make it possible to deliver the changes demanded by our plans for the 2023-28 period:

- Data and digitalisation: Delivering an 80 per cent increase in information technology (IT) systems investment. A significant expansion in our data capabilities in areas of power consumption and real time dynamic information about how the distribution network is operating to support our distribution system operator (DSO) plan and other output improvements, detailed in [annex 5.3, our 'digitalisation strategy and action plan'](#).
- Innovation: Always an essential part of our plan, but the 2023-28 period places an even greater level of dependency on effective innovation in our business. We have set out in some detail our approach to innovation in [annex 5.1 'innovation strategy'](#).
- DSO transition: Delivering the required new capabilities including skills, processes, network technology and supporting systems to deliver on our commitments detailed in [annex 4.2 'DSO strategy'](#).
- Whole systems: The transformation of the approach we take to managing the distribution network needs to be undertaken in the context of the wider energy system. This adds to the complexity and sophistication of the decision making processes and collaboration that we need to make part of the way we do business. Our approach to that element of the change is set out in [annex 4.3 'whole systems strategy'](#).
- Supporting vulnerable customers: our plan includes a significant increase in the level of support we provide to members of our communities who need it the most. The details of that are set out in [annex 4.11 'vulnerability strategy'](#).

- Workforce resilience: The quantity, capability and resilience of our available resource is essential to delivering the above areas of step change. We set out our plans to upskill and grow our workforce through recruitment, training and an improved approach to diversity, inclusion, and equity in [annex 5.2 'workforce resilience strategy'](#).

Our delivery plans for these areas are set out in the individual annexes for each of these sections, which include a granular view of how each of these areas will be achieved. As we consider the prominent, mission critical strategic changes that our objectives require, we see that the vast majority of them are covered by those documents. But we also see one other very obvious feature that has to stand alongside those factors: a significant increase in the volume of investment that needs to be delivered.

Our ability to deliver this investment requires significant increases in materials to cover the increased volumes of cables, transformers and overhead poles/supports, and increases and upskilling of labour to bolster our own workforce installing and replacing those assets. Delivering this is significantly dependent on the ability of our supply chain to meet these increased needs.

Elsewhere in our planning documents, we present over 60 detailed engineering justification papers that examine the specific areas of our activity. In every one of those papers, the deliverability implications of that programme of work are examined. Inevitably they are considered in quite a focused way that is relevant to that activity.

Therefore, the focus of this annex is to provide our stakeholders with an overview on the approach we are planning to take to the operational delivery of the increased network investment activity required to meet the load growth projected in our planning scenario. Delivering on that is essential to our aim to keep all possible pathways open for decarbonisation (detailed in [annex 4.1 'scenarios and investment planning'](#)). This is the largest capital programme in our history.

We cover the key aspects of our delivery strategy, including operating model, workforce requirements and our supply chain model, and considerations for early ramp-up in advance of 2023. In doing so, we focus in particular on:

- our approach to which services we deliver ourselves and which we buy-in from service providers;
- our supply chain and the feedback we received from our supply chain engagement to help inform our delivery plans, and how we interact with our service providers;
- analysis of actions required for us to deliver some of the more stretching aspects of our network investment plan; and
- our operational organisation and delivery approach between regional/geographic and centralised delivery functions.

We will continue to develop a more granular view of this delivery plan between draft and final business plan submissions and it will be a significant area of focus in the lead up to the 2023-28 period. This will give our stakeholders the confidence that we have a clear view of how we will deliver on our promises.

Plan Area	Δ Activity	Δ Performance	Headline changes vs. 2015-23 period	Key features of our delivery plan	
Decarbonisation	Scenarios & Investment	↑	↑	<ul style="list-style-type: none"> <li>- Over x5 increase in network reinforcement (£19.5m to £118.5m p.a.)</li> <li>- Dynamic system planning and forecasting</li> </ul>	<ul style="list-style-type: none"> <li>- Scale contractor resources through strategic framework agreements</li> </ul>
	DSO Strategy	↑	↑	<ul style="list-style-type: none"> <li>- Open data platform</li> <li>- Flexibility procurement</li> <li>- Installation of 12,700 LV monitors</li> </ul>	<ul style="list-style-type: none"> <li>- Increase number of people working to fulfil DSO functions to 39</li> <li>- Scale existing LV monitoring programme</li> <li>- See data &amp; digitalisation below</li> </ul>
	Whole Systems	↑	↑	<ul style="list-style-type: none"> <li>- Around 200 large scale sites with voltage optimisation</li> <li>- Roll out of 30 innovative microgrids</li> </ul>	<ul style="list-style-type: none"> <li>- Build on innovation outcomes</li> <li>- Recruit and train further staff to install smart grid equipment</li> </ul>
Asset Resilience	↔	↔	<ul style="list-style-type: none"> <li>- Synergistic planning using latest decarbonisation forecasts</li> </ul>	<ul style="list-style-type: none"> <li>- Deliver programmes through strategic framework agreements</li> </ul>	
Reliability	↑	↑	<ul style="list-style-type: none"> <li>- 8,600 HV automated switches and 4,500 LV automation units – ca. double 2015-23 run-rate</li> </ul>	<ul style="list-style-type: none"> <li>- Scale existing supply chain</li> <li>- Multi-skill operational teams</li> </ul>	
Environmental Action Plan	↔	↔	<ul style="list-style-type: none"> <li>- &gt;8,400 polychlorinated biphenyls (PCB) driven pole-mounted transformer changes</li> <li>- x4 increase in perfluorocarbon tracer (PFT) for cable leakage</li> </ul>	<ul style="list-style-type: none"> <li>- Scale existing supply chain through strategic framework agreements</li> <li>- Leverage 'hot glove' resources for live-line working where possible</li> </ul>	
Safety	↔	↔	<ul style="list-style-type: none"> <li>- Expansion of safety management system to our contractor base</li> </ul>	<ul style="list-style-type: none"> <li>- Invest in new safety and driving training programmes and systems</li> </ul>	
Climate Resilience	↔	↔	<ul style="list-style-type: none"> <li>- A further 48 flood defences</li> <li>- Vegetation programme for ash-tree dieback</li> </ul>	<ul style="list-style-type: none"> <li>- Adapt existing programmes and supply chain for 2023-28 volumes</li> </ul>	
Cyber & Physical Security	↔	↔	<ul style="list-style-type: none"> <li>- Enhanced physical security at all of our CNI designated sites</li> <li>- Replacement power resilient telecoms solution</li> </ul>	<ul style="list-style-type: none"> <li>- New operational technology (OT) cyber specialist recruitment and training programme</li> <li>- New solutions to detect threats and respond to attacks</li> </ul>	
Customer Service	↔	↔	<ul style="list-style-type: none"> <li>- Increase broad measure of customer service (BMCS) score to 93.5%</li> </ul>	<ul style="list-style-type: none"> <li>- New technology to offer greater choice to customers</li> </ul>	
Vulnerability	↔	↑	<ul style="list-style-type: none"> <li>- Reach &gt;70% of eligible high risk customers with priority services membership (PSM) recruitment</li> <li>- Enhance onsite welfare support for &gt;6 hour power cuts</li> </ul>	<ul style="list-style-type: none"> <li>- Increase Customer Support Vehicles</li> <li>- Establish new arrangements to provide additional on-site support</li> </ul>	
Communities	↔	↔	<ul style="list-style-type: none"> <li>- Additional £1.0m on social programmes to improve the network and community</li> <li>- Support for community energy</li> </ul>	<ul style="list-style-type: none"> <li>- Establish 'Community Energy Advisors'</li> <li>- Up-skill external partners on decarbonisation</li> </ul>	
Connections	↑	↑	<ul style="list-style-type: none"> <li>- 20% faster small works lead times</li> <li>- Expansion of AutoDesign self-service</li> <li>- Capacity to accommodate &gt;50% increase in LCT connections</li> </ul>	<ul style="list-style-type: none"> <li>- Develop our digital platforms to enable customers to self-serve and facilitate mass low carbon technology (LCT) uptake</li> </ul>	
Openness & Transparency	↔	↔	<ul style="list-style-type: none"> <li>- Sustainable procurement policy aligned to ISO20400</li> <li>- &gt;98% of suppliers with ISO14001 environmental accreditation</li> </ul>	<ul style="list-style-type: none"> <li>- Modify our procurement approach</li> <li>- Work with our supply chain to obtain accreditation</li> </ul>	
<b>ENABLERS</b>					
Innovation	↔	↔	<ul style="list-style-type: none"> <li>- Flexibility product development</li> <li>- Harnessing flexibility at low voltage to resolve LV network constraints</li> </ul>	<ul style="list-style-type: none"> <li>- Continue our delivery model of internal resources working with new and existing external partners</li> </ul>	
Data & Digitalisation	↑	↑	<ul style="list-style-type: none"> <li>- Ca. 80% increase in investment (+£10m pa.) to deliver data and flexibility outcomes</li> <li>- Enhanced data governance</li> </ul>	<ul style="list-style-type: none"> <li>- Mix of internal resources and external strategic partners</li> <li>- Recruitment and training for data skills</li> </ul>	
Workforce Resilience	↔	↔	<ul style="list-style-type: none"> <li>- Create &gt;1,000 new job opportunities</li> <li>- Build a more diverse workforce</li> <li>- Develop regional and national skills</li> </ul>	<ul style="list-style-type: none"> <li>- Upskilling and recruiting our workforce with digital skills, commercial and technical engineering expertise</li> <li>- Improve diversity, equity &amp; inclusion</li> </ul>	

Key: Activity levels vs. ED1 ↑/↓ Significant increase/decrease, ↗/↘ increase/decrease, ↔ broadly similar levels

**Table 1: Assessment of activity levels and performance changes across our plan**

**Delivery options: Make vs buy**

Our current delivery approach places emphasis on blending our in house capabilities with the capacity that can be achieved through an outsourced model where contractors operate across our region. This allows the flexibility to scale and flex resources to respond to the delivery challenges we face. The benefits that it brings are primarily:

- the ability to respond to changes in levels of demand (up or down);
- the efficiencies that are driven by the competitive tension created by the commercial procurement and contracting environment; and
- the innovation that comes through introducing other companies and management approaches to the overall capability mix.

However, it is not always the best option: the more complicated the solution, or the more unpredictable the demand for the work, the more likely it is that the more efficient model would be to approach the delivery with more in house resource.

The plans that we see emerging for the 2023-28 period are set to require an increase in both types of work. It is clear that quite a large volume of work will be relatively high volume, predictable engineering reinforcement work that lends itself to the competitive procurement process. As such, our current plans assume that we will make significant use of the capacity in the wider supply chain through outsourced contracts. We will constantly keep that balance under review, not least before submitting the final version of our business plan in December 2021. We are confident that the volume of work involved will result, in any scenario, in a scaling up of the work we buy through the outsourced model.

In the past, the limits of the sensible use of that outsourcing strategy have been influenced by the need to maintain sufficient numbers of directly employed staff to resolve issues and faults on the network throughout the whole day, every day. We currently have around 2,500 directly employed staff, whose capacity is supplemented by colleagues from our service providers. That creates the flexibility to increase or decrease the overall workforce to meet the demand at any time. In recent years, our service providers have typically had over 1,000 staff supporting our network based activities. If investment levels were to drop to very low levels, it is theoretically possible that we might be in a position where we had little or no need for contracting resources. In practice we have never been in that situation and it is not credible to suggest that the future we face could entail that.

In any practical scenario, the increase in volumes of work in our plan mean that we will need to increase our supply chain capacity and increase our own direct labour to meet the demand for the extra volume and new skills. Striking the right balance is an important part creating an overall efficient cost base. For example, experience shows that the design and overall project management of the work is more likely to be better handled in-house in most workstreams, whereas for workstreams that rely much more on the productivity of a high volume of relatively predictable tasks this can be most efficiently delivered through well structured contracting arrangements.

The illustration in Figure 1 below indicates how we deliver most of our network intervention across our own labour force and service providers. In some cases, we deliver the majority of a particular work type using direct labour, in other cases we entirely outsource it and in some cases we deliver the work through a mix of both, either as part of an end to end process or for covering peak volumes.

The grey markers indicate the ‘traditional’ types of work we have done up to this point whereas the red markers show where the increased or new volumes for the 2023-28 period would position and compare.

Whilst our business plan focuses on the areas of change, we cannot lose sight of the fact that we still have to carry out those other work activities at the same time, ensuring that:

- power cuts are resolved quickly;
- customers can connect to our network in an acceptable timescale;

- existing assets are condition assessed and maintained; and
- we execute our capital plan to replace and refurbish network assets.

Our approach involves making sure we have in-house capability for our more complex and technical work. This will continue to be our approach and it will become even more important as our network becomes smarter and digitised with greater use of data.

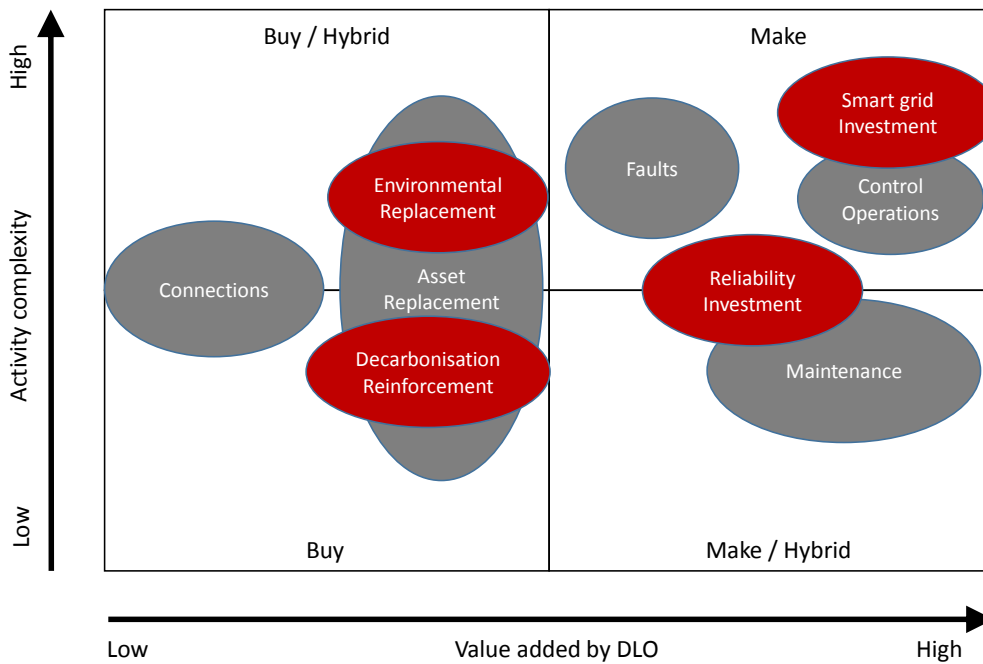


Figure 1: Network intervention delivery: own labour force vs service providers

Through our use of strategic framework agreements, we are able to award contracts for significant programmes of work that are designed to be flexible in line with our requirements.

Through our tender process we identify all of the appropriate contractors across our regions that are able to deliver the work, including being able to respond to changes in scale. We have a proven track record of delivering large programmes of work this way.

We will be scrutinising unit costs especially for work or products that are new or lack an existing stable market price as there is the potential for erratic pricing either with prices or bids which are too high or low because of a lack of understanding of scope.

Throughout the 2015-23 period we have developed and operated a set of framework contract agreements with the most cost-effective service providers as a result of competitive market tender processes. These have successfully serviced and supported the delivery of a wide range network activities, including fault work excavation, cable and service replacements across the company.

Depending upon the different commercial offerings from individual service providers, network activities have been delivered in different ways across the company as either single or multiple service providers have been awarded and operated within the framework on a geographic basis.

The contract management and performance review processes for the framework have been structured around the ways in which these activities have been managed, either regionally or centrally. Operating these frameworks has enabled us to optimise the efficiency of delivery of network activities. We are able to learn from best practices from individual

service providers who outperform expectations and enable us to adopt these ways of working across the entire framework activity.

During the 2015-23 period, our field operations function has been structured into a regional formation with six regional teams. These teams oversee the delivery of all of the distribution network activities other than major projects, which continue to be delivered centrally.

In preparing for the future we expect the next iteration of the service provider framework to move to a more regionally organised formation. In the end, that decision will be guided by the commercial offer. Any one service provider may service more than one region or specialise in a given work activity. The advantage of this will be to enable the Northern Powergrid and service provider teams to work closely as one team and optimise improvements in performance through the utilisation of flexible working across all of the network activities in the region.

### Supply chain capacity

Our current approach makes significant use of contractors across our region. We have a portfolio of framework agreements for both our goods and services requirements, and these agreements provide us the flexibility to scale resources to respond to needs.

If we are to use more of that capability in delivering the scaled-up investment program, we and our stakeholders need to have confidence that the supply chain is capable of building that additional capacity. We factor that into the way we make our choices.

When we award contracts for requirements that are strategically important to our business, they must be able to meet flexing demands and be scalable, hence we award many of our contracts in the form of framework agreements. The tender process identifies contractors operating in our region who are capable of delivering our scope and quality requirements at an affordable price. Those who meet the necessary criteria are then awarded a framework agreement.

The agreements can be flexible in setting upper and lower limits in terms of the volume of work we issue; often we set the lower limit at zero and have no upper limit. This puts the emphasis on the commercially incentivised suppliers to have the ability to secure the resources they need. In so doing it gives us access to the affordably priced contractors in our region and allows us to scale our requirements to meet the increased demands in an efficient manner.

We know that this approach works in practice because we have been using framework agreements for our strategic contracts for a number of years, and their capacity to flex to meet changing demands is proven. One of the key aspects of this approach is that the contracts can be awarded to cover multiple types of work. The diversity of work facilitates and supports the long-term commercial viability of the entire framework.

Throughout the planning process we have engaged with our service providers, who themselves are stakeholders in this plan. What they have told us has reinforced what we have heard over the years of working with the contract providers: by providing visibility of the demand profile, and facilitating unrestricted access to deliver the work, the contractors are confident that they can flex their resource capacity to meet the demand. It has also told us that we have a supply chain that is excited and eager to support us in meeting an increased delivery requirement.

Engagement with our supply chain has also helped us to understand what we can do differently to give them the best opportunity to support us in the delivery of our plan.

The engagement we have done has involved 80 per cent of the supply chain by value spend with a relatively high response rate of 50 per cent of the providers engaged. That has given us some excellent insight into what improvement initiatives we could adopt to give them the best opportunity to support us in our journey to scale up to deliver in a cost efficient, sustainable, safe and socially responsible way.

Their responses relate to the way we tender and specify our contracts, the way we issue work, and more generally around finance and other support activities:

- **Tendering:** The main focus here was on the need to have clear and early visibility of the workload, and to have long-term contracts that provide certainty of work so that resourcing decisions can be made with confidence in anticipation of the need. There was also feedback on the potential benefits of giving the supply chain more autonomous control of the end to end process of delivering work to facilitate efficiency gains.
- **The way work is issued:** The feedback here was that the supply chain would like to increase their involvement in the post-contract award processes that precede the work issue. They proposed increased collaboration on the identification, planning and scheduling of work activity, shared access to data systems and co-location of resources.
- **Finance and general aspects:** Here the focus was on speed of payment, and a general desire to be paid earlier to avoid the cost of financing work in progress. There were suggestions made that involved payments in advance of work being completed and measured, on a trust and verify basis, and there were other suggestions around the automation of the payment process to speed up transactions.

We will be considering these factors as we go forward, but the overriding message is one of positive engagement and a significant degree of confidence that we can build the capacity needed. As we do that, our focus will continue to be on creating the right structure and blend of contracts to drive efficiency. Our approach to doing that is centred on:

- **Drive to best value bid through appropriate use of e-auctions:** We have significantly ramped up our use of e-auctions to conclude our tender events, as this is a proven way of driving the best value bid when there is healthy competition. As our experience increases, we will refine our use of this to suit different tendering events.
- **Improve vendor efficiency potential by guaranteed work volumes:** By increasing the extent to which we guarantee volumes of work to our suppliers, we can improve their visibility and certainty of the future pipeline of work. This commitment from us will encourage our suppliers to invest in the time and resources that are needed to implement efficiency improvements.
- **Improve vendor efficiency potential by unblocking work pipelines:** There are many constraints with regard to operational delivery of work on the electricity network, such as third party consents, availability of skilled resources, access to the network without interrupting customer supplies, street work permissions etc. If these constraints are not carefully managed our works can be disjointed and therefore inefficient for the contractor.
- **Improve vendor efficiency potential by increased autonomy:** Some of our work streams contain a blend of internal and contracted resources. We continually review these work streams to determine if we can increase the potential for efficiency by giving increased autonomy to our supply chain, thereby avoiding handovers, and allowing seamless control of more phases in our work delivery programme.
- **Improve operational efficiency by optimising delivery models:** We are confident that we currently have a strong balance with regards to our blend of in-house resource versus contracted delivery. This gives us sufficient directly employed resources to respond quickly to faults or major incidents on our network. We do however continually review our work streams to determine if the blend can be adapted to meet changing demands based on increased contractor performance and capability.
- **Cost reduction through improved cash flow:** Our vendors routinely need to finance the cost of work in progress until they are paid for it, which has an associated cost implication. We continue to look for ways to improve this position without compromising our financial security. We aim to pay invoices on a net monthly basis, and are currently achieving payment on time on 90 per cent of invoices received.

With respect to our approach to driving value out of our supply chains in the 2023-28 period, we are looking at options to enhance the pool of suppliers to derive further efficiencies through increased competition, continuous improvement, and both identifying and deploying best practice.

### Operational capability to deliver the increased network investment activity

The network investment activity to meet the load growth projected in our planning scenario, keeping all possible pathways open for decarbonisation (detailed in [annex 4.1 'scenarios and investment planning'](#)) indicates an overall average annual increase in investment of over 40 per cent.

However, the average level of change in the total masks larger underlying changes in levels of investment in some asset classes or work types. Therefore we will need to refocus our delivery resources to match those changes in work mix.

The summary of our investment plan, illustrated in Table 2 below, shows where the changes in investment are occurring. For example, driven by the reinforcement needed for decarbonisation, our plan sees us significantly increasing the volume of work particularly on our LV overhead and underground networks; needing less investment in our 132kV and EHV overhead and underground networks but more on our major substations.

Asset Class / Work Activity	Total ED2 (2023-28) £m	Average ED2 (2023-28) £m	Average ED1 (2015-23) £m	£m variance	% variance	Δ Activity
LV overhead lines	86.7	17.3	3.9	13.5	349%	↑
LV cables	420.0	84.0	35.1	48.9	139%	↑
Connections driven reinforcement	57.0	11.4	4.8	6.6	136%	↑
Major substations (132kV and EHV)	272.8	54.6	24.5	30.0	122%	↑
HV overhead lines	96.4	19.3	8.4	10.9	129%	↑
Distribution substations	137.8	27.6	15.4	12.1	79%	↑
Non-load related investment	368.5	73.7	47.1	26.6	56%	↔
HV cables	52.7	10.5	7.7	2.9	37%	↔
Protection	43.5	8.7	6.7	2.0	29%	↔
Inspections	30.1	6.0	4.9	1.1	23%	↔
Repairs and maintenance	91.4	18.3	15.3	2.9	19%	↔
Tree cutting	54.5	10.9	9.6	1.3	14%	↔
Faults	342.8	68.6	67.9	0.6	1%	↔
ONIs	101.1	20.2	20.4	-0.2	-1%	↔
132kV and EHV overhead lines	55.7	11.1	11.3	-0.1	-1%	↓
Dismantlement	1.4	0.3	0.3	-0.1	-16%	↓
Distribution services	17.3	3.5	4.9	-1.4	-29%	↓
Smart meter intv DNO	6.5	1.3	4.0	-2.7	-68%	↓
132kV and EHV cables	39.7	7.9	24.9	-17.0	-68%	↓
<b>Total</b>	<b>2275.8</b>	<b>455.2</b>	<b>317.3</b>	<b>137.8</b>	<b>43%</b>	<b>↑</b>

**Table 2: Investment plan summary**

Some key highlights of this analysis are:

- By 2023 we will have installed 14,000 units of HV automation, over 1,000 LV smart fuses and 2,700 LV monitors onto our network, so whilst there is a significant uplift in annual volumes, we have a proven capability to deliver step changes in investment schemes and programmes.
- To deliver the increase in network reinforcement to support decarbonisation we will need to increase the level of both goods and resources we procure from our supply chain. We will also seek to recruit and train staff to install smart grid equipment through upskilling existing staff and operating a smart grid technician apprenticeship programme.
- The general reinforcement of the network (installation of replacement cables or plant) will require incremental build on existing skills as we already carry out this type of work albeit not on this scale in all cases.
- We will need to scale up the existing supply chain strategic framework contracts with appropriate scope of works and specification revisions incorporated to accommodate increased volumes. Specifically, to meet the



transformer replacement programme we will need to significantly increase the volume of transformers we source from our global supply chain, ensuring it is capable of meeting the demand.

- With our own resources we will review the number and skills of our staff in line with our workforce resilience strategy ([annex 5.2 'workforce resilience strategy'](#)) such as multi-skilling our industrial staff to deliver a wider range of work.
- We recognise that planned power cuts cause disruption to customers and landowners. To deliver our ambitious plan there will be a significant increase in network access required so avoiding outages wherever possible will reduce the impact of these works on customers.
- To minimise the impact in number and duration of outages we will look to align individual schemes and projects against areas of the network. We will seek to carry out as much work as possible using specialist teams such as our hot glove overhead teams and ensure the necessary skills groups align to ensure smooth commissioning of the installed assets.

In successive price control periods we have demonstrated our ability to deliver significant levels of network investment across varying activity/work types and our work force and supply chain are well positioned to provide the foundation blocks to deliver our 2023-28 plan.

### Operating Model

In planning for the 2015-23 period, our strategic review of operational delivery set out the approach we would take. A significant change in that respect was a drive to operate in a more regional and local manner.

In doing that we set out the general distinctions between areas which were largely urban, industrial, or rural areas. Within those areas we ensured they were locally managed with focus on ensuring we rapidly responded to faults and efficiently delivered customer connections.

Our performance since then has proven that the approach we have taken in those areas is the right direction to take as our customer satisfaction scores have improved across power cuts, connections, and general enquiries. At the same time, we have managed to continually improve unit costs and preserve the keen focus on indirect costs that was a particularly strong feature of the functional delivery models we deployed in previous years.

Our future model continues to be based on localisation with an even stronger emphasis on regional based delivery. Since publishing our plan for the 2015-23 period we have continued to refine that approach and in 2019 we made further changes that expanded the activities which are managed regionally. Accountability for the delivery of inspections, maintenance, LV and some HV capital work is now through our regional operations teams which lays down the foundations for delivery going forward.

We are confident that the model we have in place is the right one to take us into this exciting phase where significant increases in investment, particularly in the local LV networks, will be required.

The model is also proving to be a strong basis for some of the other improvements that our plan is targeting, in addition to the decarbonisation priorities. For example, we have seen significant improvements in power cut response times and in the number of occasions where customers are without power for long periods (measured, for example, by the number of power cuts that exceed 12 hours). We are projecting for those improvements to continue, and in parallel we have factored in the requirement to operate to an increasingly high standard of safety.

These two priorities come together in a potentially conflicting manner when it comes to the work our teams do during the night to provide power cut response on a 24/7 basis. The reason for that is that, in practice, delivering great power cut response involves a number of our colleagues working overtime. Historically, that has led to some people working very long shifts on some occasions.

We are very proud of what our teams achieve in getting the lights back on for our customers, sometimes in very challenging circumstances. But in the arena of safety management, it has been acknowledged for some time that managing the overall average time that people spend at work is important for their health and wellbeing. More recently, it has become clear that short-term fatigue is a very clear risk factor that needed more attention. As such, we have already moved to a situation that imposes a hard stop on the length of time that one of our operational colleagues can be on shift before they have to be relieved to allow them to rest.

This plan includes ambitious improvements in both power cut response and safety performance, not just in one or the other. This requires a different approach than we have taken previously. The changes that we have already made have included a roll out of shift working for our jointing teams in order to provide a more consistent 24/7 response to power cuts and manage the fatigue factor that is a particular feature of standby cover arrangements.

Changes like that will be supported by initiatives within the workforce resilience section ([annex 5.2 'workforce resilience strategy'](#)) and data and digitalisation strategy ([annex 5.3 'digitalisation strategy and action plan'](#)) as we recognise that our people and technology have significant parts to play in ensuring we continue to deliver efficiently.