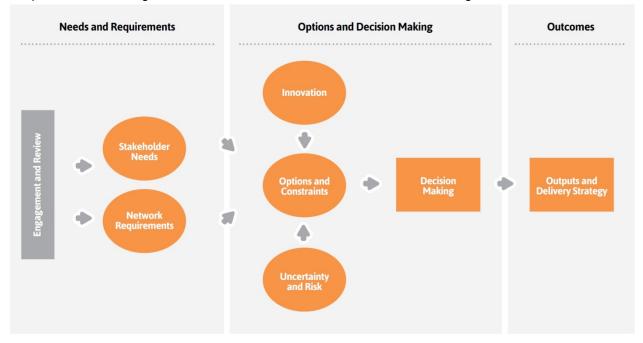


## 3 Process

In this section we describe the process we have followed to establish our RIIO-ED1 plan, which is illustrated in the diagram below.

The process for creating our Well Justified Business Plan consists of three stages.



We engage with our stakeholders through our 'Switched On: North West' campaign. This helps us to understand their needs and expectations of our network and service.

- 3.1 We used demand forecasting tools and asset performance projections to understand how we need our network to perform in order to meet the capacity and reliability requirements placed upon it over the long term.
- 3.2 We assessed a number of options and constraints in order to optimise the plan. We followed some guiding principles for determining our Outputs and used decision-making tools to help decide the best approach when a trade-off between stakeholder priorities occurred.
- 3.3 We also considered how new technologies and innovative solutions will challenge our ways of working and provide new and alternative options for delivering our plan. The outcome from this process is a set of clear, measurable outputs aligned to our stakeholder priorities supported by a strategy to deliver them.

#### Bringing our business together

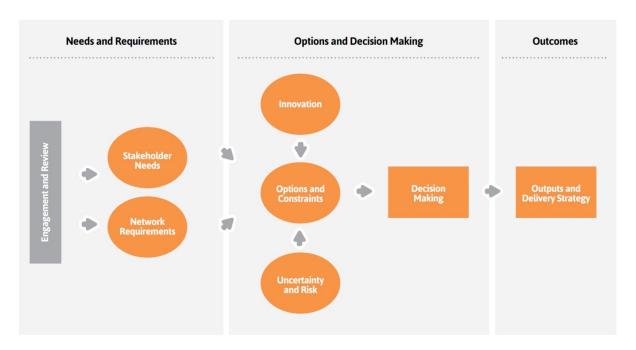
- 3.4 Our people work together to deliver a reliable and efficient service for our customers. We carried that ethos into our business planning process, involving every part of our company in its development. We created a development plan, which integrated all our different skills, disciplines and organisations and a governance process, which provided robust feedback, challenge and approval of every aspect of the plan.
- Our approach was simple. Let our experts develop their plans for their specific areas and then bring them together to refine the parts into a cohesive whole.
- 3.6 None of our teams work in isolation but each team has specific talents, skills and objectives. We believed it was right to ask them to develop their initial ideas to provide the opening framework for our plan. We coordinated this through a Business Plan Steering Group.
- 3.7 We coordinated our asset management, engineering planning, innovation and operational teams through a Network Delivery Steering Group, which allowed us to develop a cohesive investment and intervention plan that we were confident we could deliver.



- 3.8 We created a Finance Steering Group, which combined our Finance and Regulation teams to develop an efficient and compliant forecast, cost efficiency benchmarking and our financeability strategy.
- 3.9 The wider plan was co-ordinated by our RIIO Steering Group, chaired by our CEO and comprising senior representatives from each part of our business. The Steering Group set and directed the overall strategy for our plan.
- 3.10 Our Executive Leadership Team (ELT), which comprises the Directors from each part of our business and is chaired by our CEO, was responsible for deciding final strategy and direction based upon recommendations from the RIIO Steering Group.
- 3.11 Finally, overall approval of the business plan rested with our Board.

## WJBP business engagement

Expertise from across the business has been used throughout the process of formulating, developing and finalising our Business Plan for 2015-2023. The process diagram below highlights how and where business engagement fitted into the development of the original submission.



Business Engagement	Business Engagement	Business Engagement
Title: RIIO Working Groups: Stakeholder engagement; Analysis; Dates: December 2011 - May 2013 Frequency: Monthly Attendance: All business directorates were represented	Title: Investor Workshops Dates: 2012-2013 Frequency: Quarterly Attendance: Investor Groups and ELT. Directors and CEO	Title: NewsWire magazine Dates: May/July 2013 Frequency: Monthly Attendance: All employees
Title: Interactive ELT Roadshows Dates: 2012 Frequency: Twice yearly Attendance: All employees	Title: Board Meetings Dates: Ongoing Frequency: Quarterly Attendance: All Directors	Title: Strategic Direction Statement Briefings Dates: May/July 2013 Frequency: one off Attendance: All employees
Title: NewsWire Magazine Dates: 2011 onwards Frequency: Bi-monthly Attendance: All employees	Title: RIIO Steering Group Dates: June 2011 – ongoing Frequency: Fortnightly Attendance: Regulation Director and team; Finance Director and team; Network Strategy team: Head of Communications and stakeholder team; Procurement team	Title: Summary Business Plan Dates: July 2013 Frequency: one off Attendance: All employees

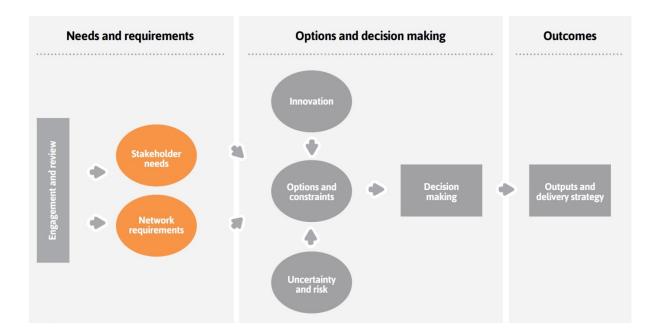


Business Engagement	Business Engagement	Business Engagement
Title: Apprentice and Graduate Workshop Briefings Dates: 2012 onwards Frequency: Annually Attendance: Apprentices, graduates, and trainees	Title: ELT RIIO Meeting Dates: December 2011 May 2013 Frequency: Monthly Attendance: All ELT Directors and CEO	Title: ELT Road shows Dates: July 2013 Frequency: Bimonthly Attendance: All employees
Title: RIIO Module in Management Development Programme Dates: 2012 onwards Frequency: Quarterly Attendance: All developing managers	Title: RIIO Working Groups: Work Programme and Volumes; Unit Costs; Delivery Methodology; Financing Dates: December 2011 - May 2013 Frequency: Monthly Attendance: All business directorates were represented	Title: Summary document on employee intranet (The Volt) Dates: July 2013 Frequency: ongoing Attendance: All employees

# **Needs and requirements**

## **Engagement and review**

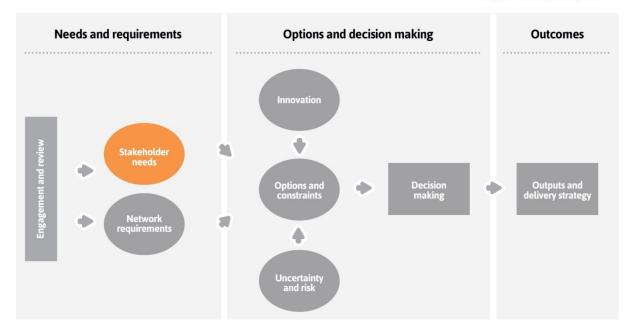
- 3.12 Our business plan is developed around the needs of our stakeholders. We have engaged in extensive consultation to understand their expectations of the services we deliver.
- 3.13 We need to remember that our network has been around for a long time and the maintenance and performance requirements of our existing poles, lines, transformers and other assets dictate a substantial part of our RIIO-ED1 plan.



#### Stakeholders' needs

- 3.14 We serve 2.4 million customers throughout the region; however, what we do affects more than 5 million people throughout the North West.
- 3.15 Our engagement approach (see Annex 1) has been to ensure that we listen to all our stakeholders' views to enable us to identify their key priorities for our plan.





#### 3.16 Our stakeholders want:

- · Reliability in our network
- Affordability in the services we deliver
- · Sustainability for the environment and communities we impact
- Customer Service excellence
- 3.17 These priorities are not always complementary to one another. Clearly explaining where we can (and in some cases cannot) meet their needs is a very important part of our stakeholder process.

## Identifying our stakeholders

- 3.18 Our description of our 2012-13 stakeholder engagement programme for the reporting year ended 31 March 2013 has been independently assured by Deloitte LLP in accordance with the International Standard on Assurance Engagement 3000 (ISAE 3000 a standard that has been designed by the International Auditing And Standards Board (IAASB) to assure non-financial data).
- 3.19 Our approach is detailed in Sub-annex A1: Stakeholder engagement strategy (from entry to Ofgem's 2013 Stakeholder Engagement incentive scheme) of Annex 1: Stakeholder methodology and responses. In this we describe how we have developed our stakeholder engagement programme applying the three principles of the AccountAbility AA1000 Principles Standard, inclusivity, materiality and responsiveness.
- 3.20 We serve a diverse population whose needs and priorities differ. We used a robust methodology to identify our different stakeholder groups and to analyse the level of influence they have on our plan. As a result, we developed a structured stakeholder grouping, influence and engagement model.

#### **Engaging with our stakeholders**

- 3.21 Our engagement process has been running for many years. We learned from our early experiences that we needed a way to efficiently co-ordinate and filter views, communications and feedback. In 2012 we launched our 'Switched On: North West' campaign to complement our business-as-usual engagement and focus on RIIO-ED1.
- 3.22 A key part of the campaign was the 'Switched On: North West' website, and much of our engagement activity directed stakeholders to this hub. The website was structured around some key areas:



## 'Why act now?'

3.23 This section was used to educate and inform stakeholders about the future challenges we face. We created a range of short films to explain them and requested stakeholders to give their views and opinions. We recognised that clear communication in this area was essential if we were to get meaningful and valuable feedback. We also recognised the importance of engaging with school children and young people as they will be the bill payers and opinion formers of the future.

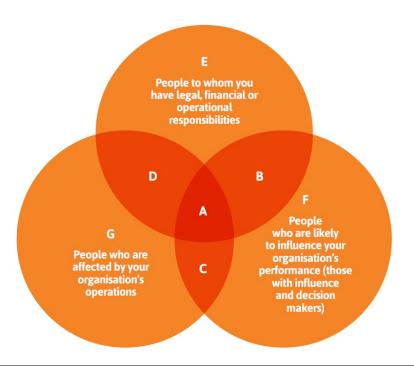
### 'Have your say'

3.24 This section gave stakeholders the opportunity to complete an on-line survey. We developed a range of surveys, which were tailored to individual stakeholder groups to ensure they were as meaningful as possible. These on-line surveys ran alongside our external activities such as the school, shopping centre and railway station roadshows.

#### 'Your influence so far'

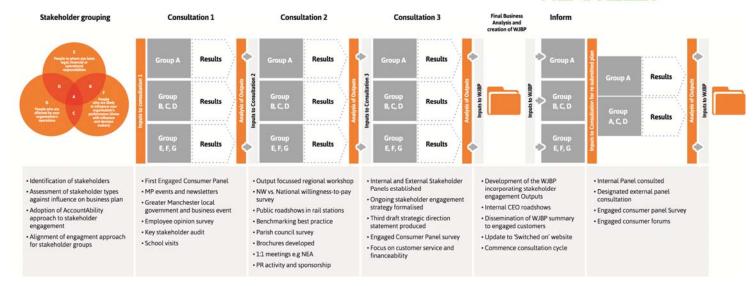
- 3.25 This section captured and collated stakeholder views and fed back how we had interpreted them. We published "What our stakeholders say" in July 2012 and our "Strategic Direction Statement" in March 2013 to provide formal feedback on how their views were influencing our plan. These publications also asked for further feedback confirming that our interpretation and plan proposals were consistent with their opinions.
- 3.26 Through this campaign we conducted the following:
  - 7305 North West customers surveyed for membership of Engaged Consumer Panel
  - 2272 members of the Engaged Consumer Panel surveyed
  - 2059 nationally representative customers surveyed
  - 430 face-to-face interviews at five public roadshows
  - 102 key stakeholders engaged at six regional workshops
  - · 27 MPs attended events, 21 MPs returned surveys
  - 108 Parish Councils engaged
  - Internal and external stakeholder panels established
- 3.27 Our approach to stakeholder engagement uses an internationally-recognised best practice developed by AccountAbility. This approach follows a robust and comprehensive engagement process and applies defined principles.





Group	Stakeholder	Group	Stakeholder
	Domestic customers		Other regional utilities
	Business customers		Construction developers
	Industrial/major users	D	Small scale generation developers
	Local authorities/highways		Emergency services
	National Grid		Network Rail
	Network operators		Other suppliers (minor)
Α	Large scale generation operators	Е	Industry code panels
	Landowners	L	UK Revenue Protection Agency
	Employees		Local, regional, national and trade media
	Investors		Credit rating agencies
	Suppliers (electricity)		National Energy Action
	Major suppliers (eg major contractors)	F	Consumer Futures
	Independent Connections Providers		Carbon Trust
	National Government		Major Energy Users Association
	Ombudsman		Energy UK (suppliers)
В	Energy Networks Association (ENA)		Schools
	British Red Cross	G	Environmental charities
	Business in the Community	G	Web users
С	Lobby groups		Social media users





- 3.28 Stakeholder engagement is fully embedded in our day-to-day business and we are committed to continuing it now, through RIIO-ED1 and in the long term.
- 3.29 We developed and refined our stakeholder strategy by working with:
  - Weber Shandwick who supported us with stakeholder identification and initial engagement
  - Populus who undertook market research to understand what people think about our business
  - 3G communications who helped with detailed stakeholder engagement and feedback
  - AccountAbility who provided advice on standards, governance, approach and assurance

### **Engaged Consumer Panel**

- 3.30 Stakeholder engagement informed us that only a third of adults in our region had heard of Electricity North West and only about one in eight adults knew what we do.
- 3.31 We worked with Populus to develop a process to educate specific groups of customers about our role within the electricity industry and the challenges that we face. We were then able to ask these engaged customers questions relating to our operations and plans, to which they were able to express informed responses.
- 3.32 We have used engaged customers' views, behaviours and attitudes as the best possible representation of the views that all customers would hold if they knew more about us.
- In addition to the formal engaged panels, we have made questions from the panels available to all of our stakeholders on our engagement website: www.enwl.co.uk/switchedon.
- 3.34 Our willingness-to-pay questionnaire was developed to create an online survey that allowed stakeholders to modify their own 'bill' based on a range of costed options covering all Output categories.
- 3.35 This powerful tool, adapted for use on our 'Switched On: North West' website, enabled a wide range of stakeholders to participate and express their views.



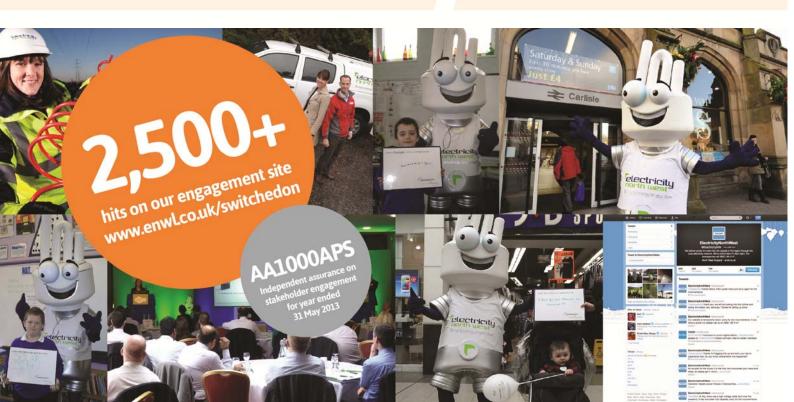
# Cycle 1

- · stakeholder identification
  - first Engaged
     Consumer Panel
- launch of first Strategic Direction Statement (2011)
- engaged consumer questionnaire
  - employee opinion survey
- 'Switched On: North West' branding and minisite launched (www.enwl.co.uk/switchedon)
  - school visits
- · educational videos produced

- key output and materiality determination
  - Greater Manchester local government and business event
- qualitative key stakeholder audit
  - MP events and newsletters
    - Executive Leadership Team internal roadshows
  - social media launch
- · online willingness-to-pay survey
  - first public roadshows

# Cycle 2

- Engaged Consumer Panel willingness-to-pay survey
  - second strategic direction statement produced
  - sponsorship of key publications
  - increased PR activity and awareness raising
    - further videos produced
  - 'How stakeholders are influencing our business plans' brochure produced
- 1-1 meetings with key new stakeholders including National Energy Action





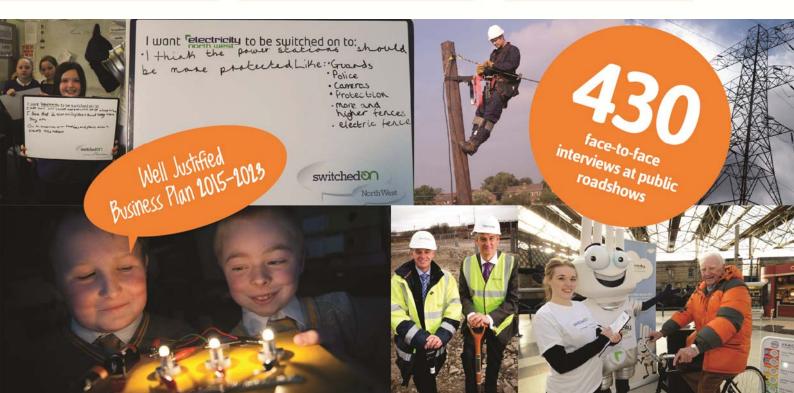
- output-focused regional workshops
- 'What our stakeholders say' brochure produced
  - further public roadshows in key rail stations
- new process for highlighting types of work carried out with new 'communications for project managers' document rolled out
  - Parish council survey
- benchmarking engagement against other similar companies to identify best practice

# Cycle 3

- External Stakeholder Panel established
- ongoing stakeholder engagement strategy formalised
  - Internal Stakeholder Panel established
    - third strategic direction statement produced
  - industry-wide suppliers' engagement
- further Engaged Consumer Panel survey focused on customer service and financeability
  - Independent Connection Providers workshop

# Cycle 4

- Engaged Consumer Panel Survey
  - Engaged Consumer Panel forums
    - Internal Stakeholder panel
  - External Stakeholder panel
- Specific project endorsement





## Reporting and feedback

- 3.36 We looked at all our engagement outputs, identified how our plan needed to accommodate them and communicated our proposals back to stakeholders.
- 3.37 We produced a number of reports to communicate to our stakeholders how we are responding to their requirements.
- 3.38 The three most significant are:
  - What our stakeholders say (2012)
  - How our stakeholders are influencing our business plans (2012)
  - Strategic direction statement (2013)

### Our stakeholder priorities

- 3.39 Our stakeholders have told us that we should prioritise our business plan around three themes:
  - Reliability
  - Affordability
  - Sustainability



3.40 They also want us to deliver exceptional Customer Service. We have created a stakeholder priorities framework to guide the development of our plans and focus on setting measurable outputs for these priorities, at the heart of which is a dedication to delivering customer service excellence. This framework is referenced throughout our plan.

#### Reliability

- 3.41 This is the level of performance delivered by the network. It is measured in terms of the frequency and duration over which a customer's electricity supply is disrupted.
- 3.42 Our stakeholders require us to:
  - Focus on providing a constant safe supply of electricity keeping the lights on and responding quickly when they go out
  - Improve our 99.99% reliability score whilst managing the trade-off with affordability
  - Continue investing in network reinforcement and capacity increases to encourage future economic growth in the region

"A proactive approach to potential problems is preferable to a reactive approach. Facilities should be robust and safe from damage from weather or crime."

Quote by: Cllr Liz Gaskell, Askam and Ireleth Parish Council, Cumbria

#### **Affordability**

3.43 This is the price customers pay for our service. We will provide an affordable, value-for-money service for all the people in the communities we serve. Our stakeholders require us to:



- Invest in supporting vulnerable groups through the provision of priority services. For many stakeholders their willingness-to-pay increased where the additional cost would be used to fund initiatives for vulnerable customers
- Help address the issue of fuel poverty in the region
- Provide extra support for electricity-only households

#### Sustainability

- 3.44 This is the provision of our services in the long term. Our stakeholders require us to:
  - Manage our network in a way which balances current and future services and investment
  - Help individuals and businesses save energy and reduce their carbon footprint
  - Provide a network that will facilitate the connection of low carbon technology such as electric cars and heat pumps
  - Respond to issues of climate change, through effective management of the network, use of renewable generation, smart meters and smart grids

#### **Customer Service**

- 3.45 This is meeting our customers' expectations when they interact with us. Our stakeholders require us to:
  - Give accurate and timely information whenever they contact us
  - Be an easy organisation to do business with
  - Manage our connection costs down and offer flexibility in commercial arrangements and types of service

## **Discounting suggestions**

3.46 In some cases we have listened to stakeholder suggestions, but after due consideration we have chosen not to implement them or alternatively have deferred implementation to a later date. The reasons for not progressing with a suggestion were explained to the stakeholders and were primarily due to issues of affordability, technical capability or practicality. Examples include:

#### "We should target achieving 100% reliability on our network"

3.47 Whilst our network is very reliable we know that the cost to achieve 100% network reliability would be prohibitive. Our aim to improve our customer interruptions and customer minutes lost scores by a further 20% will improve our reliability to frontier levels without passing on unacceptable costs to our customers. Stakeholder suggestion:

"Customers should be charged different amounts depending on the number of faults they have experienced"

3.48 Given that compensation is currently available through Guaranteed Standards of Performance it would not be appropriate to start charging customers differing amounts. Instead, we are investing to reduce the number of worst served customers. Stakeholder suggestion:

#### "We should provide generators for all our vulnerable customers"

3.49 Around 10% of our customers are "vulnerable" and providing this entire group with generators would be unaffordable. Our focus on improving reliability and restoration times will reduce the number and duration of supply interruptions for all our customers. We are working with the British Red Cross to deliver enhanced support to our vulnerable customers when they most need it. Stakeholder suggestion:

## "We should underground all our cables"

3.50 The ability to underground all our cables is constrained by affordability and geographical limitations. We have collaborated extensively with stakeholders in rural areas and in particular, National Parks and Areas of Outstanding Natural Beauty, to identify how best to target our investment in undergrounding. We are more engaged than any other DNO in undergrounding cables.



### Additional stakeholder engagement for resubmission of Business Plan

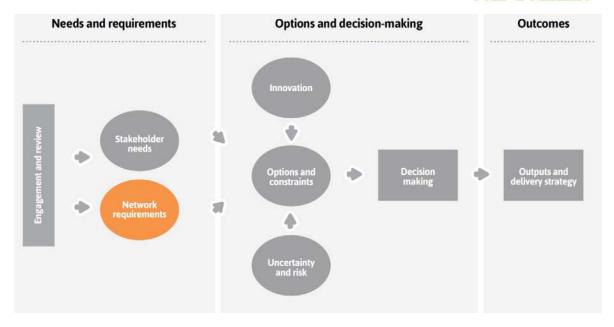
- 3.51 Following the submission of our plan to Ofgem in July 2013 and the subsequent feedback we received, our plans have been reviewed and resubmitted.
- 3.52 There were three aspects of our resubmission that we sought further stakeholder input on, to ensure that we are making the right decisions for stakeholders.
  - Changes to our original submission
  - New proposals
  - Further formal input and support of original plans
- 3.53 Using channels we established during engagement for the original submission we were able to go straight to engaged and informed stakeholders for input on the resubmission.
- 3.54 We held an extraordinary External Stakeholder Panel meeting in January 2014 and also held an extra Engaged Consumer Panel survey and workshop.
- 3.55 These engagement activities focused on four key aspects of our plan that we felt needed further input from stakeholders, and details in the plan. They were:
  - Connections
  - Vulnerable customers
  - Storm compensation
  - Electricity theft
- 3.56 For further information on stakeholder feedback and how this has influenced our plans, see Appendix 1: Stakeholder Methodology and Responses.

# **Network requirements**

# Delivering electricity to everyone in the North West requires significant infrastructure, much of which lasts for decades.

- 3.57 Our network is a complex system of poles, wires, pylons, switches, transformers and an IT and telecoms infrastructure which helps us operate and control it. We have to balance our decisions to replace, repair or refurbish parts of the network with our stakeholders' requirements for reliable, affordable and sustainable service. Understanding the condition, capacity and capability of our entire network is essential in doing this.
- 3.58 We also have to comply with all applicable health and safety standards and legal requirements. Safety is our number one priority, and we must ensure the safety of our employees and the general public in everything we do.





## **Asset Management approach**

- 3.59 We have an obligation to exercise proper stewardship of the assets that we own, ensuring that they remain safe and operable now and well into the future. We use best practice asset management processes to do this.
- 3.60 We identify the appropriate type of intervention and the right time to do it. We could spend more on assets early in their lives and this would increase reliability but would cost our customers more. Investing less and replacing assets only when they fail may save money in the short term but would result in an unreliable network and higher costs in the long term. We balance the competing factors of reliability and affordability using whole life costs and a risk-based approach to identify the optimum time to replace, renew, refurbish or retire our assets.
- 3.61 Our asset management practices have achieved BSI PAS-55:2008 certification and are continuously benchmarked against other DNOs and asset intensive industries.

#### **Asset Information**

- 3.62 We gather and analyse information on the condition of our assets. We routinely capture detailed data including the type, location, environmental conditions, age and operational attributes in addition to a condition assessment. This is captured from on-site inspections or automatically from control systems and is then collated and updated in our asset registers. We conduct regular sample audits to check data accuracy.
- 3.63 We monitor the loading of the high voltage network to identify growth in demand at local 'hotspots' around the system. This helps us determine whether our network can sustain current and future demand or whether further investment in network capacity is required.

### Condition Based Risk Management

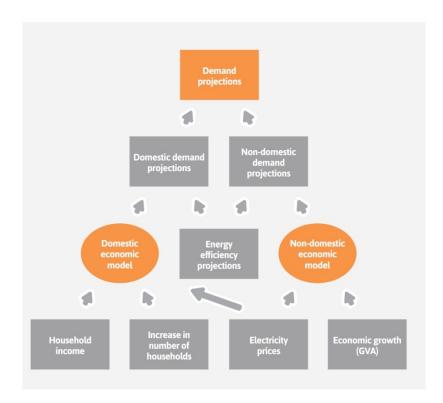
- 3.64 We have developed an industry-leading process of Condition Based Risk Management (CBRM) as part of our asset management practices.
- 3.65 CBRM combines engineering knowledge, practical experience and asset condition information to help us predict future asset performance and risk of failure. CBRM has been widely adopted by other DNOs (see Annex 2).
- 3.66 Our CBRM process produces for each asset:
  - A Health Index (HI); this measures the current condition of our assets and provides an indication of their residual life and probability of failure
  - A prediction of how these performance measures will change over time so that we can proactively
    plan the correct interventions



- 3.67 We have enhanced our CBRM systems to include an assessment of the consequence of failure of any specific asset. This assessment uses the same parameters as our Cost Benefit Analysis (CBA) (see Annex 3) modelling so that decisions are consistent and based on long-term value for money.
- 3.68 CBRM outputs are used by our asset managers who are experienced in identifying assets at risk and intervention options (eg special maintenance programmes or replacement of a group of assets). The options are modelled and assessed to determine the optimum balance between value, performance and long-term network health. These outputs are then incorporated within a comprehensive integrated asset management plan that details the best course of action for our network over time.

## **Demand forecasting**

3.69 We have considered how future economic growth in our region may affect network requirements over time. We have worked with Cambridge Economic Policy Associates (CEPA) since 2010 to develop a robust demand forecasting methodology to understand and manage these changes (see Annex 4).

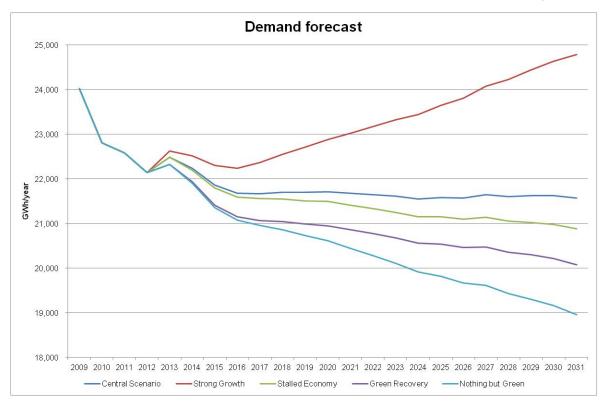


The output of our electricity demand forecasts study is shown below. We see falling demand in the green scenarios, while in the stalled economy and central case scenarios demand is flat through to 2030. Only in the strong growth scenario do we see constantly rising demand, although it does not return to 2008 levels until well into the 2020s.

		Economic Growth		
		Low	Central	High
Energy Efficiency	High	Nothing but green		Green recovery
	Central	Stalled economy	Central case	
	Low			Strong growth



- 3.70 We believe the central case is the most likely scenario. This is based upon an expectation that the non-domestic sector will show low levels of economic growth and there will be limited increases in household incomes.
- 3.71 The other scenarios around the central case have helped us to plan for the likely uncertainties that may impact our plan, particularly the demand for connections and impact of low carbon technologies (LCT).

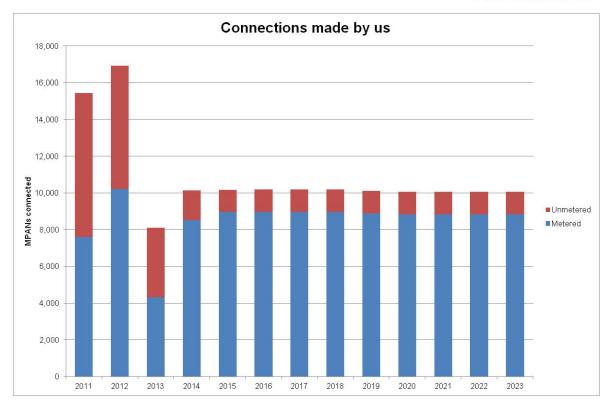


3.72 The pace of transition to the low carbon economy will affect electricity demand growth during RIIO-ED1. The Department of Energy and Climate Change (DECC) has set out four strategic planning scenarios that lead to the delivery of the UK's long-term emissions reduction targets. These are:

DECC scenario	Heat pump	Electric vehicle	Demand side response take-up
Low (4)	Low	Low	None
Medium (1)	High	Medium	None
Medium (2)	High	Medium	Medium
High (3a)	High	High	None

- 3.73 Government incentives, such as the Domestic Renewable Heat Incentive, will stimulate some demand for LCT, however, the pace of adoption is uncertain. We have concluded that the DECC Low scenario is a prudent and realistic assumption for our business plan. This is based on our assessment of economic growth projections and uncertainty over future Government stimulus measures. We recognise that the future can change and our plan includes specific provisions to deal with these changes.
- 3.74 The number of new connections made by us, Independent Connections Providers (ICPs) and Independent Distribution Network Operators (IDNOs) will further affect demand on our network. Recent high levels of unmetered connections will tail off as a number of large PFI contracts come to a close and we expect a relatively flat demand for connections throughout RIIO-ED1.





# **Options and decision-making**

Our decision-making process has two interactive stages. From our range of stakeholder requirements we firstly decide what we are going to deliver over the RIIO-ED1 period.

- 3.75 These are our Outputs. Secondly we decide how we are going to deliver these Outputs, these are our interventions. Deciding what our Outputs should be means balancing sometimes conflicting stakeholder priorities, such as affordability and reliability. We follow a set of guiding principles when determining our outputs:
  - We are primarily driven by what our stakeholders have told us they want. There is a continuing requirement for the service we provide using the assets we maintain – the needs of the network therefore determine a large proportion of what we do
  - We seek the best long-term value for customers. This is not necessarily the lowest cost option in the short term, or lowest overall cost if there are additional benefits from doing something else (eg carbon reductions from low-loss equipment)
  - We continuously benchmark ourselves against our industry and other sectors to make sure we are delivering efficiently (see Annex 5)

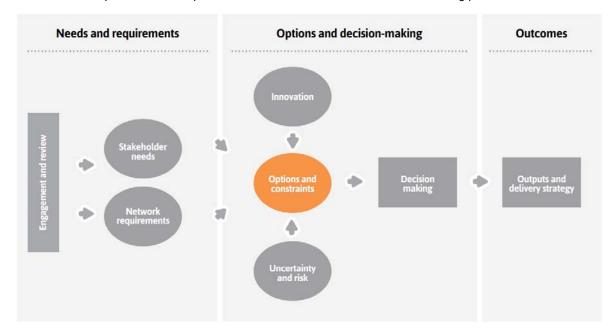




- 3.76 Our stakeholders generally understood and supported our need to take the right combination of decisions and trade-offs to deliver their priorities. We found that;
  - There is no significant trade-off between customer service and the other priority areas. Excellent customer service is our stakeholders' minimum expectation.
  - Our network is extremely reliable; however, we are committed to making it even more reliable
    through RIIO-ED1. We know that many of our stakeholders want 100% reliability but the cost is
    prohibitive and would be unacceptable if passed on to our customers. Our business plan will deliver
    an exceptional level of reliability without burdening current and future customers with
    disproportionate costs
  - Securing a safe, reliable network capable of supporting the connection of low carbon technology and growing demand requires significant investment in reinforcement. As the pace of uptake of these new solutions is uncertain, we have to balance the risk of overspending on reinforcement that may not be required with the risk of spending too little now and reinforcing our network at a greater cost in the future. Our stakeholders have told us that they support the move to a low carbon future however they are not willing to underwrite an unlimited cost. Our business plan is based upon a steady, affordable migration to low carbon solutions
  - Trade-offs between reliability and sustainability are limited as in most cases the investments made to facilitate the connection of low carbon technologies to our network will increase reliability

## **Options and constraints**

3.77 Having established our stakeholder priorities and the needs of the network we then develop our plan based upon what will be possible to deliver without unreasonable cost being passed to the customer.

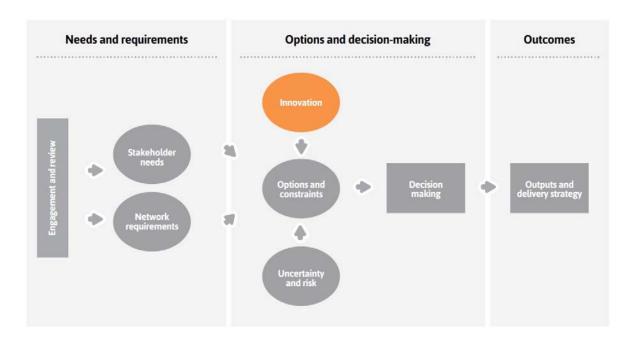


- 3.78 The decisions we make apply mainly to the selection of interventions on our network assets. These interventions include replacement, renewal, refurbishment or retirement. We consider the following options when developing our intervention plan:
  - Do nothing
  - Do more or less
  - Do different

#### Innovation

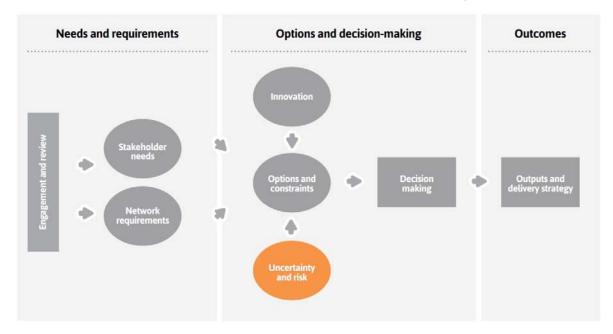
3.79 We look to innovation to help us deliver a better service at a lower cost. We follow a governance process to manage the identification, assessment, quantification and implementation of innovative solutions; both our own good ideas and those we see being used elsewhere. Our process ensures that we maximise the benefit of innovation funding from Ofgem and develop projects which will have tangible results in improving cost and service efficiency.





## **Uncertainty and risk**

3.80 We assess the impact of future uncertainty to help inform our decision-making.

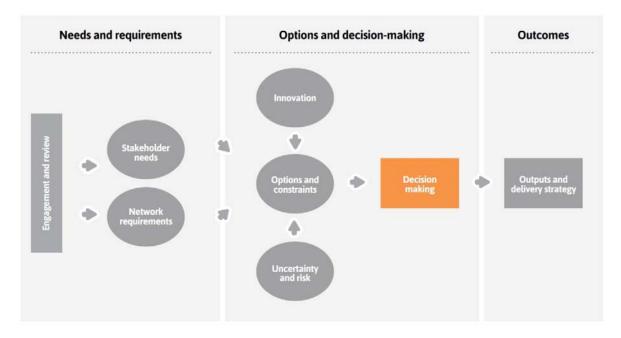


- 3.81 We consider uncertainty relating to various economic, social, technological and environmental factors and we take these into account when selecting our preferred options. We use our extensive network of academic and industry partners and Government and regulatory relationships to help develop the best possible information about the future and build flexibility into our plan and budget to accommodate deviations.
- 3.82 We also carry out risk assessments when deciding between alternative intervention options. We evaluate the impact of each option in terms of the risk to network performance and the future costs associated with managing it. This may lead us to choose an option that is not the cheapest but which may be justified if it keeps overall network risk within reasonable limits.



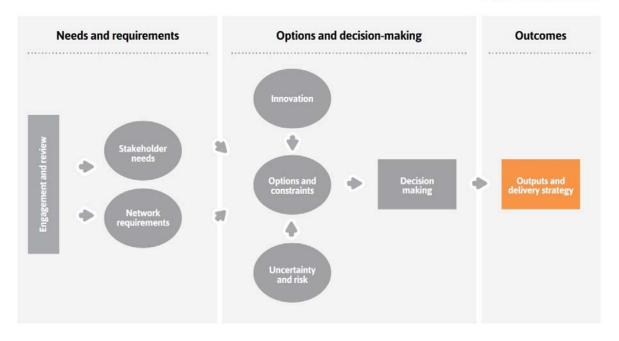
## **Decision-making**

3.83 We make investment decisions based upon a holistic view of the outcome for our stakeholders and the network.



- 3.84 We use CBA to compare options based on their impact on benefits over the long term and to identify the best value option. We have used CBA predominantly in the following areas:
  - To check our asset replacement proposals against increased or reduced options
  - · To test refurbishment and replacement options against each other
  - To test the benefits of additional network capacity or capability
- 3.85 We apply our CBA methodology above to a defined expenditure threshold. For options that fall below this threshold we apply our established engineering standards and practices to determine the appropriate solution. We have defined a common set of financial and non-financial factors to ensure consistency across our CBA assessments (see Annex 3). These include:
  - Direct costs incurred
  - Safety
  - Environment
  - Customer Service





#### **Outcomes**

3.86 The outcomes from this section are reflected in Section 4 (Outputs) and Section 5 (Expenditure).

# Our delivery model

- 3.87 Our Direct Labour Organisation (DLO) focuses on delivering our core service of managing and maintaining the network and we use our contracted partners to deliver project work such as civil construction. We do this to ensure that we retain the right base of skills and experience in our core business and give ourselves flexibility to deal with less predictable or more discreet projects.
- 3.88 We use framework contractors for the delivery of basic works such as excavation and cable laying, overhead lines and plant installation. These contracts have been established through formal market testing to allow for an element of flexibility to deliver additional or a different mix of work if required.
- 3.89 For major projects we appoint contracted project managers, following a competitive tender process. This allows us to increase or decrease resources according to specific project requirements.
- 3.90 Our supply chain specialists negotiate competitive agreements by market testing with plant, materials and equipment providers. We also seek out, encourage and reward supplier innovation. As standard practice we place two contracts for all key plant elements ensuring we have an alternative supplier should the principal supplier encounter delivery issues. This allows volumes to be flexed upwards should quantity needs increase beyond a supplier's capacity and reduces frequency of customer interruptions (see Annex 6).
- 3.91 This delivery model gives us flexibility in terms of capability and capacity. It allows us to effectively utilise our delivery teams to cope with demand variations that are out of our control such as weather events, economic changes, Government policy decisions and changes in the construction environment (see Annex 7).
- 3.92 We have tested all four DECC scenarios (see Annex 8) to understand the cost and resource implications and explored a variety of procurement options should these changes occur. From our models we are confident that we could cover the additional spend and resource variations associated with changing scenarios with no detriment to any other area of our programme.

#### Workforce renewal

3.93 We receive a specific workforce renewal (WFR) allowance to recruit, train and upskill new and existing staff in order to replace the 40% or so of our craft, engineering and technical workforce who are eligible to retire within the next 15 years.



3.94 We have invested in a new training academy in Blackburn to provide the capability and capacity to insource many of the technical and personal skills courses currently delivered by external providers. Enhanced training methods will allow us to reduce training programme length but deliver the same high quality at a reduced cost. This will reduce average annual training costs by £1 million during RIIO-ED1.

### Managing risk

- 3.95 We operate an assured risk management system to manage and mitigate any risks that may impact upon the successful delivery of the business plan. The risk management system has been externally validated during 2012 as being in accordance with ISO 31000 Risk Management principles and guidelines by SGS UK Ltd.
- 3.96 Our risk management system includes a policy statement and a risk management strategy to support continual improvement. We have clearly defined roles and responsibilities to ensure effective ownership and delivery of risk management, and all operational and non-operational risks are managed on a single corporate risk register. The corporate register is underpinned by local risk registers in various areas of the business. Risks on the corporate register are designated to a member of the Executive Leadership Team, who has overall responsibility for managing that risk.

Factor	Base Case	Alternative	Mitigation
Electricity demand	Modest economic growth through RIIO-ED1	Economically-driven demand increases would require additional reinforcement and connections activity. Lower growth than forecast would have no material impact on our plan	Continued demand forecasting with CEPA, incorporating national economic scenarios and moderating for the specific conditions in the North West.  Sufficient flexibility in operational delivery plan
Low carbon technologies	DECC Low	DECC Medium most likely variant. DECC High unlikely in the absence of significant incentives or breakthrough technologies	Sufficient flexibility in operational delivery plan to accommodate DECC Medium scenario
Smart meters	Implementation complete by 2020. Cut-out replacement rate of 2%	Delayed implementation, however not beyond the end of RIIO-ED1. Cut-out rate could range from 2% to 7%	Continued participation in Smart Grid Forum and other industry bodies. Continued liaison with electricity suppliers to understand plans and timing
Cumbria nuclear power station	Construction will commence during RIIO-ED1	Construction significantly delayed	Financial implications subject to Ofgem Uncertainty Mechanism. No detrimental impact on business plan