Impact Assessment Form

Title: RIIO Innovation Review	**Impact Assessment (IA)**
IA Number: N/A	Date:31 March 2017
Project Number: N/A	Stage: Final
Division: Networks	Source of intervention: Domestic
Team: RIIO Electricity Transmission	Type of measure: Price Control/Specific Incentive
Type of IA: Not Qualified under Section 5A UA 2000.	Contact for enquires: Neil Copeland, 020 7901 7193, neil.copeland@ofgem.gov.uk

Impact of proposals on Ofgem's Strategic Outcomes

Strategic Outcomes	Key word description
Lower bills than would otherwise have been the case.	Successful innovation projects are likely to result in cost savings for consumers compared to the conventional methods network companies will otherwise use to adapt their networks to connect new forms of generation and manage changing patterns of operation.
Reduced environmental damage both now and in the future.	Successful innovation projects will help accelerate the development of a low carbon energy sector and deliver wider environmental benefits.
Improved reliability and safety.	Innovation in networks will also enhance reliability and safety.
Better quality of service, appropriate for an essential service.	Innovation can improve the quality of service and security of supply delivered by licensees.
Better Social Outcomes	N/A

Quality Assurance Status	Reviewed

Summary: Interventions and Options

Rationale for intervention, objectives and options

What is the problem under consideration? Why is Ofgem intervention necessary

The rationale for Ofgem intervention in innovation was articulated in the establishment of the RIIO framework. At that time, we chose funding caps that we thought were appropriate. This review and our policy proposals are focused on establishing appropriate caps for RIIO ED1 from 2017 to 2023, and also to address in a timely manner any issues arising from the implementation of the schemes in the gas and electricity RIIO price controls.

What are the policy objectives and intended effects?

The policy objective of our proposals is to improve the efficiency and effectiveness of the NIC and NIA schemes in achieving their objectives[1] and deliver consumers better value for money than in the absence of our proposals. As a result of the independent evaluation and our post-implementation review we think there are several opportunities to improve the schemes. The effect of our proposals will be to drive improvements in the quality and overall impact of innovation projects that are funded for trials.

What are the policy options that have been considered, including any alternatives to regulation? Please justify the preferred option (further details in Evidence Base)

We have considered two options as part of this impact assessment, these are:

Option 1 (Status quo) – Maintaining the level of electricity NIC funding (£90m p.a.), with no changes to the governance arrangements for either the NIC or NIA.

Option 2 (Preferred option) - Reducing the level of electricity NIC funding (to £70m p.a.) and amending the NIC and NIA governance arrangements for all RIIO price controls.

Option 2 is our preferred option because it is likely to deliver better value for money for consumers (both financial, carbon and environmental) by improving efficiency.

We consider that the alternatives to regulation that were considered at RIIO design and discarded remain inappropriate.

1 https://www.ofgem.gov.uk/ofgem-publications/51871/riiohandbook.pdf

Monetised Impacts (£m)

Business Impact Target Qualifying Provision	N/A
Business Impact Target (EANDCB)	N/A
Net Benefit	We have chosen to deal with these qualitatively as although evaluation of the Low Carbon Network Fund (LCNF) indicates Potential Net Benefits there is much uncertainty surrounding the estimates.

Hard to Monetise Impacts

Describe any hard to monetise impacts, including mid-term and long term-sustainability factors (maximum 7 lines)

We consider that compared to the status quo the preferred option will be better able to

- reduce consumers' bills,
- increase knowledge gain, and
- accelerate the transition to a low carbon economy.

We therefore expect the changes to be fully consistent with achieving addressing strategic and sustainability issues (meeting mid-term and long term GHG targets, improving system security and resilience, and positive impact on environmental assets).

Will the policy be reviewed? Yes	**If applicable, set review date:** This has been a focused review for the purposes of establishing the financial commitment from the RIIO ED1 in 2017 – 2023 and to address in a timely manner issues arising from the implementation of the schemes in the RIIO price controls. A fundamental review regarding the existence of innovation schemes will take place as part of the next price control reviews for all the sectors, the next round of which begin in 2021.

Summary: Option 1: (Status quo) – Maintaining the level of electricity NIC funding (£90m p.a.), with no changes to the governance arrangements for either the NIC or NIA

Price base year: N/A	**PV Base Year:** N/A	**Time Period:** N/A	**Net Benefit (Present Value (PV) (£m)**		
			Low: N/A	**High:** N/A	**Best Estimate:** N/A

COSTS (£m)	**Total Transition** (Constant Price) Years	**Average Annual** (excl. Transition)(Constant Price)	**Total Cost** (Present Value)
Best Estimate	N/A	N/A	N/A
Description and scale of key monetised costs by 'main affected groups': N/A			

Other key non-monetised costs by 'main affected groups'.

- **Current Consumers** – who will continue to fund the competitions and the development of submissions to the competition by licensees. Expect costs to remain close to their current level. The maximum amount that could be awarded each year is £90m however only 40%[2] of the funding available has been awarded each year since the start of the electricity NIC.
- **Network operators** – who may continue to fund some of the development costs of their submissions. Expect to remain at the current level.
- **Ofgem** – will continue to invest internal and consultancy resource on assessing submissions. Expect to remain at the current level.

BENEFITS (£m)	**Total Transition** (Constant Price) Years	**Average Annual** (excl. Transition)(Constant Price)	**Total Benefit** (Present Value)
Best Estimate	N/A	N/A	N/A
Description and scale of key monetised benefits by 'main affected groups': N/A			

Other key non-monetised benefits by 'main affected groups'

- **Future Consumers** – who will receive lower bills, as network cost savings realised by network companies from rolling out their innovations will be shared through RIIO's efficiency incentive, as well as through future price control reviews when we reset their costs to take account of cost savings related to the new business plans. We would also expect benefits realised by other parties, e.g. lower connection costs, to indirectly flow through to consumers through lower wholesale energy prices or lower subsidy requirements.
- **Network operators** – will incur lower costs to operate and maintain their network than would have been the case without innovation funding.
- **Ofgem** – receives information on innovation in the sector that it can use to inform its policy work.
- **Other parties** – such as generators who receive quicker, cheaper connections than they would have done without the innovative methods.

The affected groups above may also receive environmental and/or carbon benefits through the retention of the status quo arrangements as this is core requirement of all projects that are funded.

Key Assumptions/sensitivities/risks **Discount rate (%)**	N/A
As this option is retaining the status quo, we're not expecting to see any marked changes in behaviour, benefits and costs if this option is adopted. However, we don't have substantive evidence to support this assumption. In addition, there is a risk that retaining the status quo does not move licensees towards being highly innovative companies, which is likely to be a key condition for realising the full potential future benefits that are potentially available under the NIC, assuming there is some read across from the independent evaluation of the LCNF. Poyry estimates suggest that for the LCNF the total benefits significantly exceed the costs for the system as a whole. We reviewed these estimates and tested the potential future benefit for consumers with conservative assumptions. These suggest that retaining the status quo is expected to deliver positive net benefits.	

BUSINESS ASSESSMENT (Option 1)	
Direct impact on businesses (EANCB)	**Score £m:** N/A

2 This includes when the LCNF was run alongside the NIC before the start of the RIIO ED1 period.

Summary: Option 2 (preferred option) - Reducing the level of electricity NIC funding (to £70m p.a.) and amending the NIC and NIA governance arrangements for all RIIO price controls

Price base year: N/A	**PV Base Year:** N/A	**Time Period:** N/A	**Net Benefit (Present Value (PV) (£m)**		
			Low: N/A	**High:** N/A	**Best Estimate:** N/A

COSTS (£m)	**Total Transition** (Constant Price) Years	**Average Annual** (excl. Transition)(Constant Price)	**Total Cost** (Present Value)
Best Estimate	N/A	N/A	N/A

Description and scale of key monetised costs by 'main affected groups': N/A

Other key non-monetised costs by 'main affected groups'.

- **Current Consumers** – who will continue to fund the competitions, but potentially by up to £100m more than is currently the case due to higher expected take up of the NIC leading to more funding being awarded than under the status quo. In response, some stakeholders warned that take up of funding will drop as a result of our proposals but the extent or materiality of this impact was not quantified.
- **Network operators** – who will fund all of the development costs of submissions, as opposed to being able to recover a proportion of them from consumers as under the status quo – there will be no consumer contribution going forward. They will also make a non-refundable 10% compulsory contribution to projects, unlike the status quo.
- **Ofgem** – will continue to invest internal and consultancy resource on assessing submissions but, if there is greater take up of the NIC, this will be at a marginally higher level than under the status quo.

BENEFITS (£m)	**Total Transition** (Constant Price) Years	**Average Annual** (excl. Transition)(Constant Price)	**Total Benefit** (Present Value)
Best Estimate	N/A	N/A	N/A

Description and scale of key monetised benefits by 'main affected groups': N/A

Other key non-monetised benefits by 'main affected groups'

- **Future Consumers** – we would expect higher quality bids and more third party led projects, which may be more innovative, to lead to greater direct and indirect benefits to consumers compared to the status quo. We note that some stakeholders think that take up will decrease as a result of our proposals.
- **Network operators** – expect the resulting benefits under this option to be greater than under the status quo option, assuming more (and strategically targeted) innovation leads to lower network costs.
- **Ofgem** – expect to receive higher quality information on the potential of innovation to be rolled out to allow us to make better decisions.
- **Other parties** – expect the resulting benefits under this option to be greater than under the status quo option, assuming more (and strategically targeted) innovation leads to wider network customers, such as generators, realising the benefits of successful innovation.

We would expect the affected groups above to continue to receive environmental and/or carbon benefits under this option with it remaining a core requirement of all projects that are funded.

Key Assumptions/sensitivities/risks **Discount rate (%)** N/A

We do not have evidence but it is our expectation that the level of take up will increase due to the changes we propose, ie third party access and making the process less burdensome. However, there is also a risk that by increasing company contributions and removing the funding of bid preparation costs, that network companies will make fewer bids – some stakeholders have also made this point in their consultation responses but the extent or materiality of this risk wasn't quantified. That said, this risk could also be somewhat offset through better quality and more strategically targeted bids – which we expect partly as a result of companies putting more of their own money at risk.

Relative to the Poyry estimates of total benefits significantly exceeds the costs, we assume that our proposals do not change this range, but increase the likelihood that future projects deliver at the higher end of it.

BUSINESS ASSESSMENT (Option 2)	
Direct impact on businesses (EANCB)	**Score £m:** N/A

Evidence Base (for summary sheets)

Background

Background to the network innovation review is given in Chapter 1 of the policy paper that this IA accompanies.

In the past, monopoly network companies have generally undertaken less innovation than is optimal. One reason for this is that cost savings resulting from innovations are shared with consumers and lead to lower cost allowances in future price controls. At a time when there is significant change in the energy system, the companies need to be innovative to adapt networks to meet future challenges at lowest cost to consumers. We recognised these issues when we undertook a review of the price control framework we use to regulate the network companies and introduced an innovation stimulus.[3]

Problems under consideration and rationale for intervention

At the time of the last electricity distribution price control review (RIIO ED1), we confirmed the level of NIC funding (£90m) for the electricity NIC in 2014/15 and 2015/16 – covering both transmission and distribution. We said we would review the benefits that have been derived from the LCNF, an innovation scheme introduced as part of the previous electricity distribution price control, before developing our proposals for the level of NIC funding for the remainder of the RIIO-ED1 period. In addition, we committed to a post implementation review after two years of operation in order that we could address any issues in a timely manner.

We intend to review the overall framework for incentivising innovation as part of the RIIO 2 strategy. This IA focuses on aspects of the NIC and NIA schemes which currently make around £170m per year available under the RIIO 1 price controls.

Policy Objective

The policy objective of our proposals are to improve the efficiency and effectiveness of the NIC and NIA schemes in achieving their objectives[4] and deliver consumers better value for money than in the absence of our proposals. As a result of the independent evaluation and our post-implementation review we think there are several opportunities to improve the schemes. The effect of our proposals will be to drive improvements in the quantity, quality and overall impact of innovation projects that funded for trials.

We expect the combination of our proposals will achieve this by:

- increasing the coordination across the network companies to focus on the key challenges that offer greater potential benefits;

---

[3] For further information on the policy rationale for introducing a innovation stimulus package as part of the price control please see this working paper published in 2010 as part of the price control framework review project RPI-X@20: https://www.ofgem.gov.uk/ofgem-publications/52011/rpi-x20-innovation-working-paperfinal-draft.pdf

[4] https://www.ofgem.gov.uk/ofgem-publications/51871/riiohandbook.pdf

- increasing participation by third parties, increasing the pool of expertise and technologies for potential innovation projects;
- building on previous learnings and international experience;
- avoiding unnecessary duplication; and,
- better disseminating project learning and adoption of successful projects by other network companies into their business where there are appropriate opportunities for this.

Has previous innovation funding delivered value for money?

The LCNF provided up to £500m of funding to the electricity distribution network operators (DNOs) during the previous price control that ran from 2010 to 2015. As part of the LCNF, 23 projects costing £245m were funded via the competition and a further 40 projects costing £30m were funded through the allowance.

We commissioned consultants, Poyry and Ricardo Energy to carry out an independent evaluation of the LCNF. The aim of the evaluation is to understand the extent to which the LCNF has helped to develop innovation in the industry, whether the projects have helped to accelerate the development of a low carbon energy sector and delivered value for money.

In addition, we asked the consultants to identify if there were any gaps, and whether we should make any changes to the governance arrangements of the NIC and NIA – successors to the LCNF.

Given the materiality of the funding paid for by consumers under the NIC, we considered it was important to commission an independent review of the scheme. The purpose of the evaluation was to look at the impact the scheme has had on companies' culture towards innovation activities, as well as whether the projects funded under the scheme will deliver value for money for consumers.

Key findings from the quantitative assessment

The key findings are:

- The potential future discounted net benefits of the LCNF range from £800m to £1,200m if projects are not rolled out beyond the trialling DNOs.
- The potential discounted net benefits increase considerably if a full roll out across the GB takes place – the financial benefits could be between £4,800m to £8,100m.
- The LCNF's impact on CO_2 emissions could range between -107 million tonnes and -215 million tonnes, depending on the adoption of innovative methods by DNOs other than the trialling DNO. As a point of comparison the provision estimates of CO_2 emission from UK energy supply in 2015 was 136 million tonnes.

The consultants' estimates are for the energy system as a whole. Using a set of fairly conservative set of assumptions we estimated the potential future financial benefit for consumers. This suggests a significantly net positive outcome for consumers from the LCNF (excluding any carbon benefits). Expressed in terms of a benefit to cost ratio, these conservative assumptions indicate that £3 of potential benefit would be achieved for every £1 of funding. More detail on this analysis can be found in chapter 2 of the consultation paper that this IA accompanies.

Description of options to address the problems under consideration

Option 1 (Status quo) – Maintaining the level of electricity NIC funding (£90m p.a.), with no changes to the governance arrangements for either the NIC or NIA

This option involves retaining the current level of electricity NIC funding at £90m per annum until the end of RIIO T1. Since the inception of the NIC in 2013[5], on average only 60% of the funding available under the electricity competitions has been requested each year. On average only 40% of the available funding has been awarded.

There is a risk that retaining the status quo means that no further progress is made by network companies. While the Poyry report notes that networks have become more innovative – innovation is not yet core to how the network companies operate.

Option 2 (preferred option) - Reducing the level of electricity NIC funding (to £70m p.a.) and amending the NIC and NIA governance arrangements for all RIIO price controls

This option involves a number of changes including:

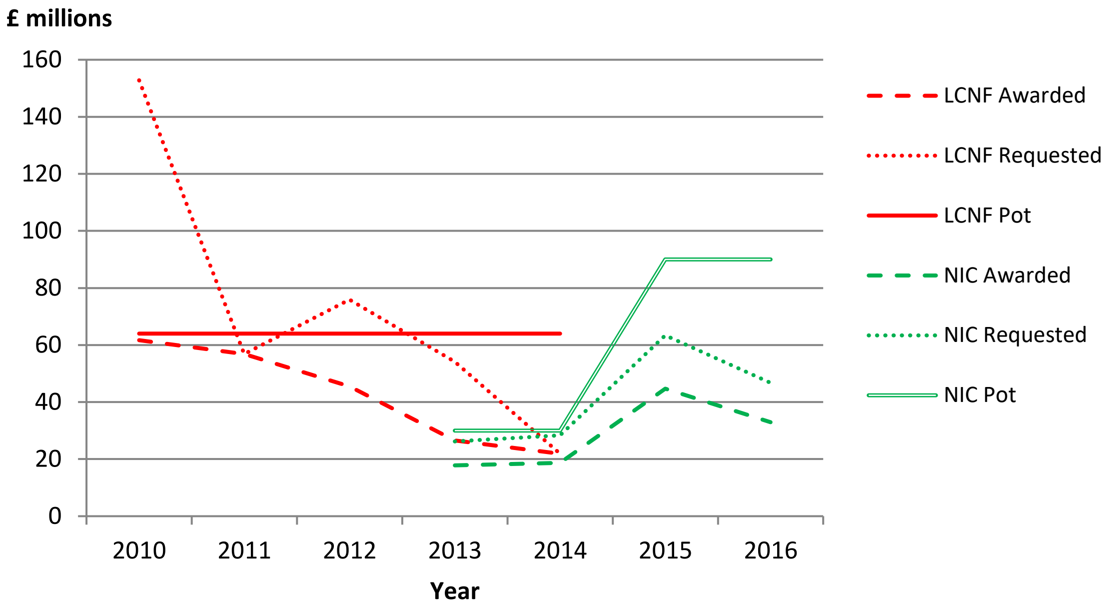
- Reducing the level of funding from £90m per year to £70m per year.
- Enhancing third party participation - requiring licensees to issue an annual call for ideas for third party led projects to which they must respond publically.
- NIC and NIA governance changes - a number of less substantive changes to the governance arrangements for these schemes.

This section describes our proposals as well as the rationale, costs, benefits, risks and assumptions of the main changes we propose.

Reducing the level of funding available under the electricity NIC from £90m to £70m

Our innovation competitions have been historically undersubscribed as shown in the graph below.

[5] Taking the NIC and LCNF together while they were being run in parallel..



We believe reducing the level of funding at the same time as seeking to increase the number of participants will improve the competitiveness of the NIC.

Consumers will continue to bear the cost of funding NIC projects. However, we expect that the total cost of the NIC to consumers will increase in the short term. At the same time we also expect network companies to bear more of the cost of their NIC projects (more below).

However, ultimately we expect consumers to benefit financially in the long term through lower bills. The financial benefits network companies receive by implementing innovative solutions will be shared through the sharing factor. While the exact sharing factor varies from licensee to licensee the average sharing factor for electricity distributors is 60%. This means that where a licensee underspends on its price control allowance 40% is returned to customers during the current period. In addition, we would expect to reduce network companies' allowances at the time of the next price control review to reflect the new innovative solutions available to them. Finally we would also expect consumers to benefit indirectly through some of the cost savings that other parties (e.g. generators) in the supply chain receive. For example, facilitating additional distributed generation at lower cost could reduce the wholesale price of energy or lower subsidy requirements.

In addition to the financial benefits described above, we expect consumers will also derive carbon and/or environmental benefits.

We have assumed that NIC projects, and the rollout of the methods trialled within them, will deliver financial, environmental and/or carbon benefits to customers. This is in line with the NIC eligibility and evaluation criteria. We assumed that the net financial benefits delivered by projects will in line with Poyry's evaluation of the LCNF.

Enhancing third party participation

Currently third parties are only able to bid for projects if they partner with a network company, they cannot bid independently for direct access under current legislation. To stimulate increased third party interest and activity we propose to:

- Require network companies to issue an annual call for ideas from third parties that they would be required to respond to publically. We expect the increased transparency and profile of the issue to improve the calibre of projects that are brought forward and to make it harder for the network companies to not engage with good third-party proposals.

- Increase the number of projects that network companies can put forward as full submissions from two to four. This would allow network companies to continue to bring forward their own ideas alongside any third party ideas.

We have seen a few projects come forward under the competitions that have been led by third-parties. In some instances have resulted in some successful projects being brought forward that have been led by third parties, with some success.

- Western Power Distribution - hold an annual 'NIC bid challenge' where they outline several issues they face, and encourage parties to come forward with innovative ideas. This process has directly led to two third party led NIC projects being submitted for funding under this year.

- National Grid - in both electricity and gas, in the last few years they have annually sought to reach out to third parties for innovative proposals that align with a defined list of themes (that can change annually) linked to their corporate innovation strategies.

We have assumed that third parties will want to lead NIC projects. As noted above the experience of WPD would support those assumptions. However, we've received feedback from third-parties that it is often difficult to do this.

In addition, there is a general assumption that third party led projects will be more disruptive than network company led projects because they do not have a vested interest in the status quo business model of the network companies. However, there is no evidence to support this.

The table below then lists our less substantive changes we are proposing along with the associated rationale, costs, benefits, risks and assumptions.

Impact Assessment Form

NIC and NIA governance changes

Description of less substantive governance changes with associated rationale, costs, benefits, risks and assumptions

Proposed change	Rationale	Costs	Benefits	Risks & Assumptions
Require network companies to make a non-refundable 10% funding contribution to NIC projects. This would involve abolishing the Successful Delivery Reward (SDR) for future projects.	Currently companies typically get back their 10% contribution through the SDR. We want companies to have a real stake in these projects so that they bring forward better projects and manage them better. We think that 100% funding seems too generous given the Poyry report estimates 30-40% of the benefits are associated with the network companies.	• **Network operators** – who will not be able to have their compulsory contribution returned to them. • **Third party participants** – who will need to provide project funding.	• **Consumers –** who will fund a smaller proportion of the final cost of projects. We would also expect them to benefit from the quality of proposals increasing.	• We have assumed that this change will not affect the level of take up – however, there is a risk, reinforced by stakeholder feedback, that network companies see the NIC as less appealing and therefore do not participate as they will not have their compulsory contribution returned to them as is the case under the status quo. • However, we have assumed because companies are putting more of their own funds at risk they will go to greater lengths to ensure projects are well thought through and effectively project managed.
Requiring network companies to develop a sectoral innovation strategy having consulted with relevant parties (eg EPSRC, BEIS and Innovate UK). This should focus on the strategic issues facing the network companies and identify gaps which innovation projects could fill.	More joined up approach across network companies and better engagement between parties, eg network companies collectively. Aim to bring forward more targeted proposals and maximise the value to consumers.	• **Network operators** – who will need to invest time and resource developing this strategy.	• **Network operators –** who will have a better understanding of the strategic issues facing them and the sector as a whole. • **Technology developers, potential third party participants & Ofgem –** who will better	• We have assumed that network companies will be able to work together to develop a common strategy – there is a risk this may not be possible. • We have assumed that a common industry strategy will

Proposed change	Rationale	Costs	Benefits	Risks & Assumptions
			understand the strategic challenges network operators face.	lead to better informed market participants which will lead to more applicable innovations. • There is no evidence to support these assumptions.
Removal of allowance for bid preparation costs for the NIC. Currently £175k is allowed per licensee group per year.	Reducing the number of weaker projects coming forward that are least likely to deliver benefits. Also consistent with other sources of innovation funding that the network companies might access elsewhere where companies do not receive explicit funds to develop submissions.	• **Network operators & Third Party Participants** – who will need to find the cost of developing submissions without support from consumers.	• **Consumers –** who will no longer fund the development of submissions.	• There is a risk that it reduces the number of beneficial projects coming forward – because licensees will need to develop submissions themselves. This is a view supported by consultation responses but has not be quantified. • However, we have also assumed that because participants are putting more of their own funds at risk that they are more likely to focus on genuine challenges the energy system is facing.
Removing provision for contingency funds to be awarded for NIC projects that are over-spending.	These provisions have never been used and removing them provides a further incentive for the companies to manage projects efficiently.	• **Network operators –** who will take the risk that their funding request is accurate as they will not be able to seek additional money after the project has been funded.	• **Consumers –** who no longer bear the risk of funding cost overruns.	• We have assumed this will not affect take up as this mechanism has never been used under either the LCNF or NIC.
Reducing the reporting frequency and procedural burden for NIC projects in operation. In particular, going from 6 monthly to annual reporting and changing	More proportionate treatment given the size of the individual projects. Current approaches require us to approve changes we think are relatively small – eg	• **Network operators & Ofgem –** who will have slightly less visibility of how NIC projects are progressing.	• **Network operators, Ofgem and consumers –** who will benefit from the reduced cost of producing six	• We have assumed this will not affect the knowledge transfer from NIC projects. Progress reports are

Proposed change	Rationale	Costs	Benefits	Risks & Assumptions
the process for amending ongoing NIC projects.	switching from internal resource to contractors to deliver a task.		monthly progress reports and processing change requests.	the minimum level of knowledge transfer requirements and most network companies currently exceed these requirements. • There is a risk that by relaxing the requirements network companies do not go as far in exceeding the minimum requirements as they currently do. • There is also a risk that issues with a project's progress do not become apparent to Ofgem until later in time than they would under the status quo.
Require better reporting by licensees on BAU potential and plans for each project undertaken by themselves and other licensees. In addition capture future expected benefits when innovative methods are rolled out. As part of this work we will ask licensees to explain what ideas that have been developed will be taken forward or not and why. We will also ask them to explain the scale of any proposed rollouts and the forecast benefits.	Encourage greater take up of other licensees' projects that could deliver GB-wide benefits. Put us in a stronger position when setting the next round of RIIO 2 price controls.	• **Network operators & Ofgem –** who will need to invest time and resource developing, recording and assessing the new data, but we consider this is an activity that they have been undertaken anyway.	• **Consumers & Ofgem** – who will benefit from additional data being used to reduce costs for consumers.	• We have assumed that this additional data will give us visibility of the innovative solutions rolled out by licensees and their associated cost savings.
No longer require our approval of alternative bank account arrangements – instead state what these alternative arrangements must deliver.	Unnecessary process that doesn't add much value.		• **All parties** – who benefit from the reduced cost of removing unnecessary processes.	• We have assumed that there are no costs associated with removing this process.
No longer require approval of Customer Engagement and Data Protection Plans. Maintain	We don't think our approval of Customer Engagement Plans adds significant value – they merely		• **All parties** – who benefit from the reduced cost of removing	• We have assumed that there are no costs associated with

Proposed change	Rationale	Costs	Benefits	Risks & Assumptions
requirements not to interfere with Smart Meter rollout and not to conduct sales activities as part of trials.	state what data companies plan to collect from participants in trials and how they plan to engage with different parties. Data Protection Act means our approval of Data Protection Plans doesn't add anything useful		unnecessary processes.	removing the procedural elements but retaining the firm requirements.
Require licensees to have systems in place to be able to share data arising from trials (anonymised where necessary).	Allow better use of the data by other parties.	• **Network companies –** who will bear any costs associated with data requests.	• **Other interested parties** – who will benefit from being able to access data that has already been gathered by network companies in their own research which should deliver further benefits for all consumers.	• There is a risk that licensees receive significant numbers of data requests. If this is the case then a better systems may be more cost and resource effective. • We have assumed that this will not be overly burdensome on licensees.
Joint assessment of projects requiring funding from the gas and electricity NICs.	Remove need for separate submission to both competitions by having a joint submission and assessment by both expert panels. Aim to facilitate projects that provide benefits to both gas and electricity network customers.		• **Network operators & third party participants** – who only need to develop a single submission. • **Ofgem & Consumers** – who only need to fund the assessment of a single submission.	• We have assumed the current structure of submissions will remain the same.
Increase level of justification required to register as a Network Innovation Allowance project.	Currently the companies just have to tick the relevant box to say why they consider it eligible. Due to concerns identified over some projects, we propose that relevant licensees should justify more explicitly why projects are eligible and innovative (as they do for the competitions).	• **Network operators** – will need to invest additional time and resource developing NIA registration documents.	• **Ofgem** – who will have more confidence that projects are eligible than is currently the case.	• We have assumed that this will not involve significantly more resource than the status quo as we only propose requiring licensees to publish information they should already hold internally.

Monetised and non-monetised costs and benefits

We have chosen to deal with these entirely qualitatively as although evaluation of the Low Carbon Network Fund (LCNF) indicates Potential Net Benefits there is much uncertainty surrounding the estimates.

We think our proposals for the NIC and NIA schemes in the gas and electricity price controls could lead to significant future positive net financial benefits and facilitate significant carbon emission reductions for consumers.

Successful innovation is critical if the network companies are to adapt their networks in response to rapid and significant change in the energy mix at lowest cost to consumers. We expect our proposals will help drive improvements in the quantity, quality and impact of innovation projects that are funded under the RIIO innovation stimulus package. Therefore we think our proposals will ultimately help lessen the cost impacts on consumers' bills compared to the status quo and also mean that the network companies are more able to play a full role in accelerating the transition to a low carbon economy.

Increasing the participation of third parties, which we are seeking to stimulate through our proposals, could mean more proposals are funded in the NIC scheme than has previously been the case to date. This would likely result in a greater proportion of available innovation funding being awarded during the remainder the RIIO ED1 than we might expect in the absence of our proposals. This will mean consumers could pay up to the full funding cap over the period 2017 to 2023 of £350m. This could be around £100m more than the total amount we might expect if we extrapolated the funding awarded annually to projects in the NIC scheme to date.

We also recognise there is a risk that a 10% non-refundable contribution to project costs and removing the recovery of bid preparation costs might result in some network companies making fewer bids.

However, we think the net impact will result in better quality and more strategically targeted bids – which we expect partly as a result of companies putting more of their own money at risk. Overall, we think our proposals will likely boost the future net financial and carbon benefits consumers get from the NIC and NIA schemes compared to the status quo of not making changes to the existing NIC and NIA arrangements in the RIIO price controls.

Proportionality of assessment.

We consider that this impact assessment (combined with the consultation document, and the Ricardo and Poyry Evaluation of the LCNF is proportionate to the scale of changes proposed and the funding commitment going forward (£350m maximum).

Direct cost and benefits to business

Our view is that this does not constitute a qualifying measure under Business Impact Target as it is part of our price controls.

Wider impacts

Boosting the innovative capability of network companies could produce employment benefits and spin-off benefits to other sectors.

Summary and preferred option with description of implementation plan.

As noted above, under our preferred option, the objectives of the NIC and NIA remain the same as those established when setting up RIIO – to bring about culture change within the network companies so that they invest in the innovation necessary to facilitate the transition to a low carbon economy at lowest cost to consumers.

We believe our proposals will better achieve the stated objectives of the NIC and NIA by:

- increasing the competition for funds by reducing the funding available, and
- increasing the pool of ideas and technologies through increasing the involvement of third parties.

In addition, reducing the regulatory burden associated with implementing NIC and NIA projects should allow licensees to invest more resource in implementing the projects themselves.

Our proposal to reduce the level of funding available under the electricity NIC would take effect from 2017. While we would introduce the requirement on network companies to hold a call for ideas in 2017 the first time projects that result from this call will be able to participate in the NIC is 2018. Further details regarding the timing of our proposals can be found in our consultation document published alongside this impact assessment.