

Sustainability First

**New Energy and Water Public Interest Network
'New-Pin'**

Workshop 3

Long-run resilience & the public interest

22nd June 2016

**This slide-set is not intended for wider circulation please beyond members
of the sponsor group and the New-Pin Network**

Agenda – 22nd June 2016

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|---|--|--------------|
| 1 | Welcome, apologies and introductions | 10:00 |
| 2 | Feedback – Member actions from February ‘ <i>Trust & confidence</i> ’ workshop | 10:05 |
| 3 | Overview of ‘ <i>Long-run resilience and the public interest</i> ’ discussion paper | 10:20 |
| 4 | Key 21 st century emerging issues for long-run resilience
Case studies: electricity dependency; interdependency & new actors | 10:50 |
| | COFFEE | 11:50 |
| 5 | Areas where existing approaches may need to adapt
Case studies: local, regional & national landscape; flexibility | 12:00 |
| | NETWORKING LUNCH | 13:00 |
| 6 | Keeping on the right track – who should be responsible for what?
Case studies: standards; metrics. Followed by break out group discussion | 13:45 |
| 7 | Stakeholder engagement – brief scoping discussion for 19/10/16 workshop | 15:00 |
| 8 | Feedback and AOB | 15:25 |

Agenda item 2 - Feedback

Network member actions on *'Trust and Confidence'*

- In the spirit of keeping things concrete, can people share **examples of practical actions** they took as a result of last workshop on *Trust and Confidence*?
- **Recap** – themes to help ensure trust & confidence discussed in February
 - **Openness and communications:** eg explaining judgments & trade offs; consistent, collective, sector-wide narrative; rhetoric audits
 - **Stakeholder engagement:** eg timely & embedded; 'legitimacy' & diversity of those engaged; resourcing of public interest groups
 - **Motivations and long-term outcomes:** eg clear & stable policy / regulatory frameworks; signaling change in advance; board horizon scanning
 - **Leadership, culture and values:** eg 'live' codes of conduct; staff judged on conduct & ethos as well as outcomes; culture audits.

Agenda item 3 - Overview of '*Long-run resilience*' paper

Approach and methodology

- Paper is collaborative effort – thank you
- Involved brief literature review & **16 interviews** with Network members & other stakeholders – draws on your case studies & those from further afield
- Slides are high level - **DRAFT** discussion paper is far more detailed
- **Additional comments by 29th June welcomed**
- Focus of paper is long-run resilience and the **public interest**
- **Part I**
 - Definitions: What is long-run resilience?
 - Overview of current landscape and approaches
- **Part II**
 - Emerging issues and areas that may need to adapt
 - Enablers to judge whether change is needed and roles & responsibilities

Agenda item 3 - Overview of '*Long-run resilience*' paper

Definitions – framing the debate

- Resilience has two parts
 - Anticipation of trends and variability
 - Ability to withstand major problems and maintain services & systems
- For citizens and consumers, may need to take account **wider 'elements'** of resilience
 - Technical
 - Environmental
 - Social (including social infrastructure)
 - Requirements of citizens and consumers
 - Linkages between systems
 - System personnel and processes
- For public, resilience of **infrastructure, services & systems** all important
- Different perspectives: by geography, interest group / segment, actor

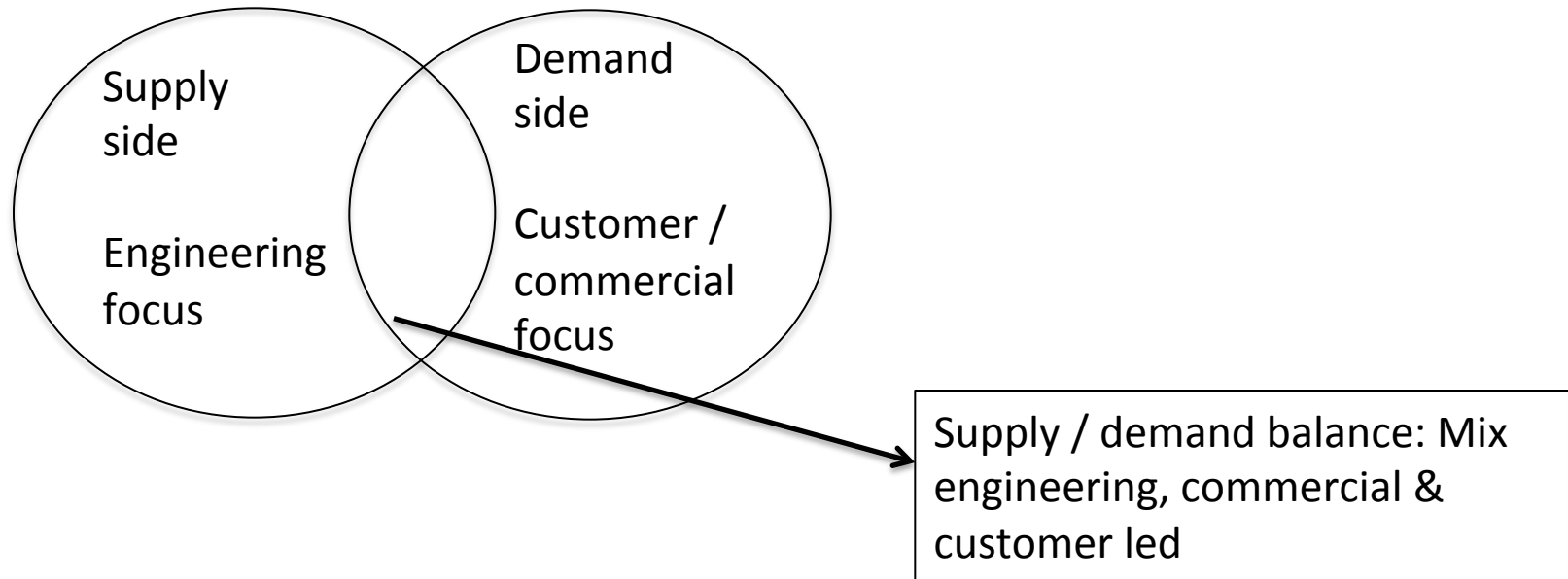
Agenda item 3 - Overview of '*Long-run resilience*' paper

Significant differences between energy and water

- Paper includes high level overview of statutes, license conditions etc
- **Energy**
 - Nationally and locally networked but disaggregated value chain
 - National deterministic and universal standards
 - Electricity changing rapidly – emergence of local
 - Gas – interconnection is international - imports
- **Water resources**
 - Differences in resource, geography etc lead to differences within sector
 - Extent of network inter-connection increasing but varied; no national grid
 - Companies still largely integrated
 - Resilience standards, in as far as they exist, company / catchment focused
- **Wastewater/ drainage**
 - Interconnection increasing, previously private sewers an issue

Agenda item 3 - Overview of 'Long-run resilience' paper

Current landscape and approaches – lots going on



- Respective size of circles, & the overlap, varies **within & between** sectors
- Climate change = uncertainty: significant activity already addressing this
- Much good practice: **scope to embed this further?**
- Need to **share lessons** & develop a **common 'language'** between sectors

Agenda item 3 - Overview of *'Long-run resilience'* paper

Does anything need to change? If so, what and how?

- Get own sector approach 'right' & take account of **emerging issues**
- Emerging issues largely driven by rapid changes in **IT / digital communications**
 - Include: electricity dependency; complex interdependencies; emergence of new actors; new and growing types of extreme risk / 'black swan' events; and citizen / customer expectations & perceptions
- Areas where **existing approaches may need to adapt**
 - Include: local, regional & national landscape; cross sector approaches; and markets and other interventions
 - How might these changes best be managed for citizens & consumers in the round? What is 'fair' and what are the limits?
- **Enablers to help judge whether on 'right track'**
 - Include: stakeholder engagement; information sharing; standards and decision making tools; metrics; and leadership
 - Have we got the right 'tools' in the tool box?

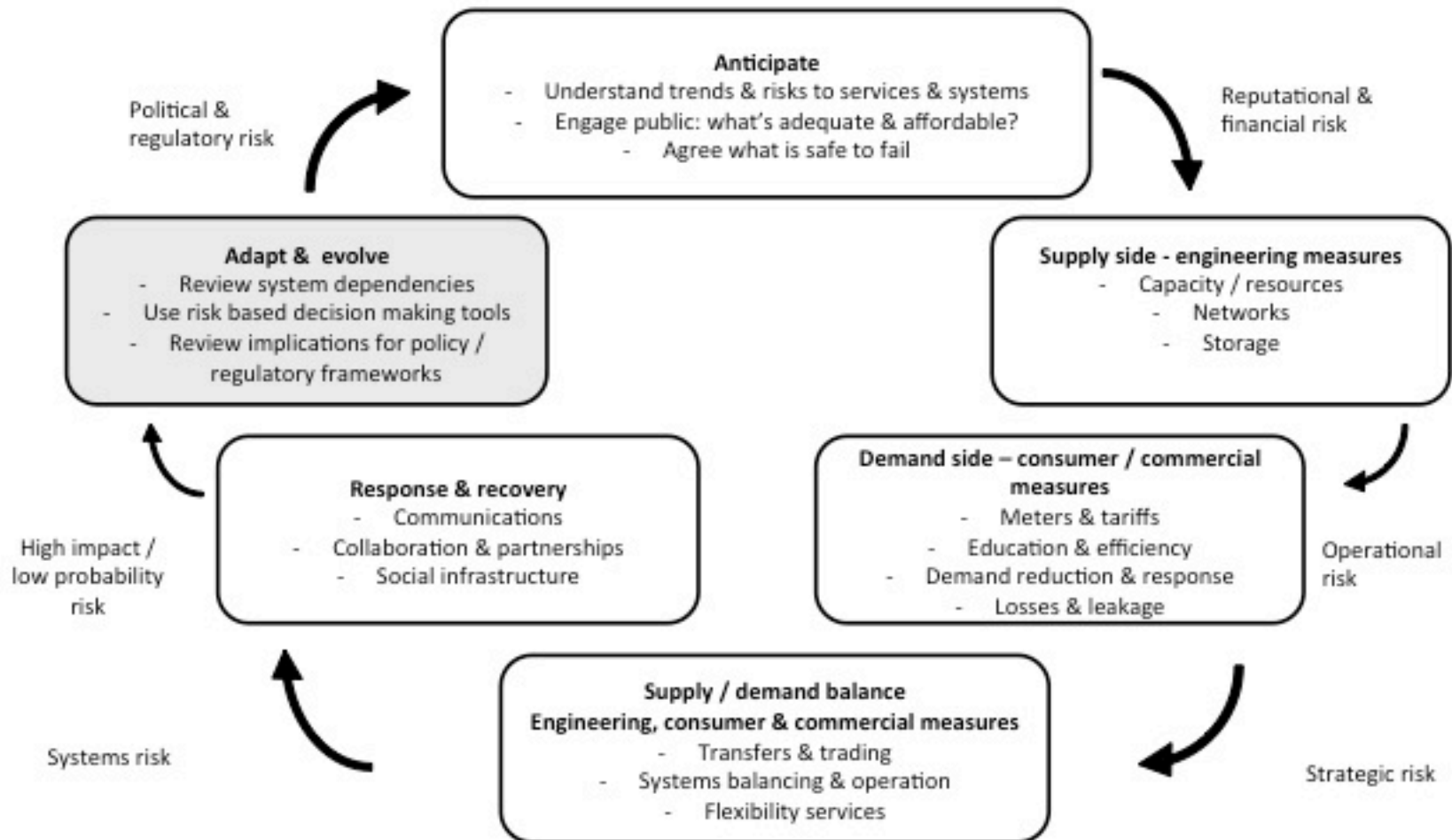
Agenda item 3 - Overview of '*Long-run resilience*' paper

Keeping on the 'right track' – responsibilities & principles

- **Responsibilities**
 - Complex picture, lots of different actors – need leadership
 - Boundaries for decisions / responsibility for trade-offs need to be clear
- **Possible principles**
 - **Risk based** – take account of full range of risks (including systemic risks)
 - **Agile** – adaptive, keep options open
 - **Engaged stakeholders** – including in cross sector issues
 - **Understanding of affordability** – fairness, including between generations
 - **Cross sector view** – technically, commercially, across systems and from citizen / consumer point of view
 - **Partnerships and collaboration** – build connections
 - **Transparency** – share assumptions & clarify responsibilities to build confidence in decision making

Agenda item 3 - Overview of 'Long-run resilience' paper

Future approaches – dynamic and iterative



Agenda item 4 – Key 21st century emerging issues (i)

In context of climate change uncertainty...

1. Electricity dependency

- Electricity ‘enables’ & ‘disables’ IT / digital communications

2. Complex interdependencies

- **Within** sectors (‘suite’ new low carbon technologies in energy & range of upstream actors in water)
- **Between** sectors (new approaches to resilience increase these eg CCS)

3. Emergence of new actors

- Non Traditional Business Models, local players & disruptive technologies

4. New and growing types of extreme risk / ‘black swan’ events

- Cyber attacks, extreme weather – increasing and ‘bunching’ impacts

5. Citizen / customer expectations & perceptions

- New experiences & scepticism with ‘the establishment’

Agenda item 4 – Key 21st century emerging issues (ii)

Emerging 21st century issues

- Electricity dependency
- Complex interdependencies
- Emergence of new actors
- New and growing types of extreme risk / 'black swan' events
- Citizen / customer expectations & perceptions

Case studies

- Electricity dependency (Maxine Frerk, Ofgem)
- Interdependency & new actors (Penny Hodges, Southern Water)

Questions for discussion

1. Is there anything missing in the list of issues?
2. Are there any priorities?
3. Any different perspectives between stakeholders?

Agenda item 5 (i)

Areas in which '20th century' approaches might need to adapt

1. More local / regional focus

- Opportunities: diversity; community knowledge; active demand side; engagement in response and recovery; devolved people power
- Risks: increased interfaces in system; expensive system balancing; need grids for back-up; reduced opportunities for risk pooling; stranded assets

2. An increase in cross-sector approaches

- Opportunities: anticipation of single point / cascade failures; synergies between solutions; comprehensive view on VFM / affordability
- Risks: complexity leads to inertia; expertise lost; retreat to technical focus

3. Market approaches and other interventions

- Opportunities: efficiency; innovation; diversity; flexibility
- Risks: market failures may be invisible; capital inadequacy; interventions may be more effective (eg changing building / product standards)

Agenda item 5 (ii)

Areas in which '20th century' approaches might need to adapt

Case studies

- The impact of local (Simon Roberts, Centre for Sustainable Energy)
- Flexibility (Sarah Clark, Southern Water and Sarah Rigby, SSEPD)

Questions for discussion – from the citizen / consumer perspective

1. Any other areas in which existing approaches might need to adapt?
2. How are local, regional & national approaches to resilience best managed 'in the round?'
3. What is 'fair' given possible local, regional and national differences?
4. How are cross sector challenges best managed to secure resilience?
5. How far can market approaches secure resilience?
6. What are the limits of market approaches in terms of resilience?

Agenda item 6 – Keeping on the right track (i)

Enablers: how to judge whether you are on the right track

1. Stakeholder engagement

- Who leads on cross sector issues – local & national?

2. Information sharing

- Is data sufficiently open / granular? Are lessons from failures shared?

3. Standards and decision making tools

- How should standards be applied? Universal or tailored?
- On what basis should standards be set? Deterministic or risk based?

4. Metrics

- How to develop cross sector metrics? Is cust. satisfaction / VFM relevant?

5. Leadership

- Who should determine what level of risk is appropriate & who should bear this? Role and remit of the National Infrastructure Commission?

Case studies: Standards (Jonathan Booth, ENW), Metrics (Jacob Tompkins, Waterwise)

Agenda item 6 – Keeping on the right track (iii)

Who should be responsible for what?

Questions to discuss	Activities / enablers	Actors
<ol style="list-style-type: none"> 1. Are these the 'right' enablers? 2. Who should be responsible for what? 3. Are the relationships & boundaries between different actors clear and effective? 4. Can you provide practical & specific examples? 	<ul style="list-style-type: none"> • Standard setting • Metrics • Engagement • Information sharing • Delivery • Leadership 	<ul style="list-style-type: none"> • National Government • NIC, CCC, CPNI • Regulators • Companies • Local / Regional Government • The public – Citizens & consumers

When thinking about responsibilities, does it depend on whether you are talking about **infrastructure, services or systems?**

Agenda item 6 – Keeping on the right track (ii)

Who should be responsible for what?

National Government

National Infrastructure
Commission (NIC)

Committee on Climate
Change (CCC)

Centre for Protection of
Nat. Infrastructure (CPNI)

Regulators
(economic &
environmental)

Energy
companies

New
entrants

Water
companies

Local / Regional Government

The public - citizens and consumers

Agenda item 7 – Stakeholder engagement

Scoping discussion for workshop on 19th October 2016

1. Current landscape for engagement (including purpose & expectations)
2. Knowledge that needs to be captured for public interest to be represented, now and in the next ten years - & major gaps
 - Strategic / long-term issues?
 - Financial / cost issues & trade-offs?
 - Systemic and cross-sector issues?
 - Joining up national and local engagement initiatives?
3. **Assessment of how different research approaches may help uncover the public interest in these ‘difficult’ areas & examination of their pros & cons**
4. Skills, experience & governance processes public interest reps need for engagement to be effective. Now & in next ten years
5. Is resource a key issue or are there other barriers to engagement? How can these be overcome & what does good practice look like – in digital world?
6. Implications for regulators, companies & institutions
7. **How can New-Pin best contribute to engagement / capacity building?**

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