Expressions of interest

Grants available to develop resilience primers for industry

Detailed scope for applicants

Initial deadline for expressions of interest for this work is **27 August 2018**.

All applications should be made using the [Expressions of Interest form](#) on the [Resilience Shift website](#).
Introduction

Incentivizing resilience through articulating its value

There is no question that enhancing the resilience of critical infrastructure systems and the industries that rely on them will help make the world not only safer but also better able to ensure continued functionality.

The problem is that organizations are often unaware of key incentives or other levers to embed and enhance resilience in the services that they provide to society, and the value that resilience can bring, both to their own organisations and to others in their wider system-of-systems. This leaves unfulfilled opportunities.

The Resilience Shift’s proposition is that by identifying these opportunities, in the context of specific critical infrastructure systems and associated industries and by providing examples of how organizations at the forefront are already embedding and enhancing resilience, we can lower the barrier for all organizations to embed resilience into their decision-making. This critical mass of organizations will help ‘move the needle’ on resilience in practice, in line with our vision statement and impact framework.

The Resilience Shift is prepared to award a series of grants, anticipated to be between £25k and £40k for one primer, focused on one industry sector, to individual grantees, or “facilitators”, who will develop practical, industry-specific primers that will identify:

1. The current best practices by leading organizations (within the selected industry) who embed resilience into their decision-making and the incentives/levers that drive them.
2. Incentives/levers that are currently available for driving resilience, but not capitalized upon due to lack of awareness of their existence.
3. How to scale and augment the current menu of incentives/levers.

These primers are envisioned to be industry-specific, booklet-style, guidance documents that capture best practice as to how and when resilience is valued within a given industry, highlighting key decision points when resilience can be enhanced.

Who should apply to become a grantee?

One of the principles of our work is to focus on the supply-side (e.g. to supply what is needed by end-users), and to work with end-users to articulate the value proposition – why will our outputs add value, and how do we know. To achieve this, we want to engage directly with industry stakeholders, and with those responsible for incentivizing resilience, from the outset.
Our grantees should propose an industry where they have existing contacts, both with end-users of the primers, and with organizations that incentivize resilience – “incentivizers”, for example, insurance companies or credit-rating agencies. These incentivizers can provide tangible incentives, such as reduced insurance premiums for more resilient construction.

These stakeholders and incentivizers will be asked to volunteer their time to be available to the facilitators for interviews and contributions to the mentioned primers.

The proposed critical infrastructure system or associated industry should be one that provides essential services to society, where a lack of resilience could have a direct impact on the safety and well-being of society.

The Resilience Shift is a global initiative, we want to develop a common understanding across infrastructure systems globally, and we’d be interested to hear from applicants working in any part of the world.

If you are interested in working with us in this space, please review the more detailed scope of work set out below, and provide your response using the Expressions of Interest form on the Resilience Shift website.

We propose to select several grantees to work with us through the rest of 2018, and therefore the initial selection will take place using submissions received before 27 August 2018.

However, we anticipate continuing this work into 2019, and welcome submissions from interested grantees at any time.

**Scope of work**

Key objectives of this project are to demonstrate, through engagement and tangible outputs, that our proposition - to produce industry-focused primers articulating how and when to enhance resilience of a system - will have the following impacts:

- Making resilience more tangible, practical and relevant, in order to increase the uptake of resilience approaches in practice.

- Help stakeholders within a specified industry identify, realize, and sustain the potential resilience value of strategic decisions and projects.

- Identify incentives/levers that are currently driving resilience decisions and investments, and hence opportunities to increase the uptake of these in practice.

- Discover gaps and identify untapped incentives/levers within each industry to help promote more widespread adoption of resilience thinking.
Phase 1: Interview industry stakeholders to understand current best practice

- Interview 5-10 stakeholders from a single pre-agreed industry (e.g. power, water, telecom, healthcare, etc.) to first develop an understanding of how prevalent and to what degree resilience, weighed relative to all other factors, drives decisions and investment in current business practices.

- Identify the extent to which existing incentives/levers (or other drivers) are leveraged to drive these decisions and investments and whether there are opportunities for scaling-up these resilience-enhancing incentives.

- Evaluate and describe the economic and other valuation tools they currently deploy to make decisions.

- Map the resilience value-chain for the industry and identify pinch points or roadblocks preventing the economics of resilience from benefiting stakeholders.

- Identify common decisions (and drivers) that most critically erode possible resilience-enhancing investments.

- Create communications materials and impactful output throughout this phase, to raise awareness and raise profile of our activities.

Phase 2: Interview incentivizers to identify unrealized opportunities

- Use the information collected during Phase 1 to identify the gaps and opportunities for incentivizing resilience in the current environment.

- Interview individuals representing incentivizers, to identify incentives/levers that industry stakeholders may not be aware of and to understand how they could potentially encourage more widespread adoption of resilience practices (e.g. insurers may need to shift the way the price risk to incentivize resilience).

- Identify “levers” that may provide indirect incentives, such as an improved credit rating.

- Create communications materials and impactful output throughout this phase, to raise awareness and raise profile of our activities.

The diagram below illustrates the proposed role of the “facilitator” in relation to the industry-specific stakeholders and the “incentivizers” and “levers”. These are not intended to be final or to indicate our preferred industry – they are illustrative only.

Also see the example case study included below for further explanation of expectations.
Phase 3: Develop and disseminate a primer

- Produce an industry-specific primer that captures best practice as to how and when resilience is valued within a given industry, highlighting key decision points when resilience can be enhanced. These key points can include, for example, business continuity planning, insurance decisions, or upgrading aging infrastructure. A successful primer will be focused on practical takeaways that will be shared publicly and promoted within specific industries for the purpose of raising awareness on industry-specific incentives and levers to ultimately encourage widespread adoption of resilience-enhancing practices.

- The format and template for the primers, which should be short and practical, will be developed in collaboration with the Resilience Shift.

- Work with us to disseminate outputs, and help us to collate lessons learned and feedback, in line with our principle of learning by doing, what would we improve for subsequent related work.

We expect our grantees to work collaboratively both with the Resilience Shift and with our partner organizations and other grantees in order to develop and grow our community.

We are as interested in the journey as we are in the destination therefore our grantees are expected to provide frequent external facing communications as a core part of this work.

Staff from the Resilience Shift will help develop a template for the primers, identify some stakeholders/incentivizers/levers, and provide general guidance for this research.

How to apply

What we need from you:

- **Staffing** – Please provide the name of the proposed lead investigator, availability as a percent commitment to this project over four months, and a brief bio (maximum 100 words).

- **Experience** - Please describe briefly your experience working directly with one of the industries listed below to help quantify the costs and benefits of implementing a resilience-focused project or initiative within a given organization (maximum 200 words).

- **Work to be leveraged** – Please describe and provide at least 1-2 examples of your available resources, tools/assessment techniques, and competencies specific to resilience value capture that have made your past work in the space successful and could be leveraged to enhance the proposed project (maximum 200 words).
• **Industry preferences** – Select 1 – 3 industries from the list below that you are best prepared to work with in a facilitator capacity. Please explain your specific experience consulting for or working in this industry and identify existing relationships with potential decision-making stakeholders within the proposed industry that you can leverage for this work. Please state the country(s) in which your industry contacts operate (maximum 200 words).

**Industry shortlist**

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<thead>
<tr>
<th>Transport</th>
<th>Power</th>
<th>Energy</th>
<th>Water</th>
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<tr>
<td>Communications</td>
<td>Food supply</td>
<td>Solid waste</td>
<td>Cyberspace</td>
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<tr>
<td>Housing</td>
<td>Health care</td>
<td>Education</td>
<td>Welfare</td>
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**Other information**

• Our anticipated **duration is four months** to complete the three phases of work described.

• The Resilience Shift is funded by [Lloyd’s Register Foundation](#), a charitable foundation with a mission to enhance the safety of life and property and advance public education. As part of this, all Resilience Shift outputs are intended to be in the public domain, and our work should be open and transparent.

• Frequent, external facing communications about our work are an important component, as we want our grantees to support us in this.

• Our standard [Terms and Conditions](#) are available here. Please get in touch if you have any questions about these.

• See our [FAQs](#) for more information on our governance structure and more. [Contact us](#) if you have further questions.
Diagram showing the proposed role of the “facilitator”.

It is envisaged that facilitators should have existing relationships with potential decision-making stakeholders within the proposed industry, which can be leveraged for this work.

A facilitator will be responsible for interviewing individuals representing incentivizers to identify incentives that industry stakeholders may not be aware of, or understand how they could potentially encourage more widespread adoption of resilience practices.

Stakeholders #1
Water
1. Suez
2. Veolia
3. Thames Water
4. ...
5. ...

Facilitator #1

Incentivizers
1. Insurers
2. Government
3. Shareholders
4. ...
5. ...

Stakeholders #2
Telecom
1. Verizon
2. AT&T
3. Vodafone
4. ...
5. ...

Facilitator #2

Levers
1. KPIs
2. Reputation
3. Credit Ratings
4. ...
5. ...

Stakeholders #3
Healthcare
1. CVS Health
2. McKesson
3. Cardinal
4. ...
5. ...

Facilitator #3
Example case study

**Water supply infrastructure in arid regions**

A facilitator may be selected to study the municipal water supply sector in arid regions.

Through conducting interviews, assessing existing decision tools, and mapping how resilience fits into capital investment planning, Resilience Shift facilitators will then identify key incentives and levers tied to resilience. Examples of these incentives would include credit ratings, government subsidies for green infrastructure, industry best practices, building codes, and fine pricing for public health violations. In this case, incentivizers would include credit rating agencies, government, industry membership organizations, building code contributors, and regulators.

In this study, the facilitator, may recognize that financial (low-cost), operational (ease of installation), and regulatory (building code permitted) incentives have led many water agencies to adopt and install water pipes using less-resilient materials compared to alternatives. Furthermore, the facilitator finds that recent intense wildfires in arid regions have caused these water pipes to melt, which leeches carcinogens into the system causing permanent contamination of water mains and forcing full-scale replacements. These system replacements are costing millions and taking up to two years, which can critically delay the recovery period for communities bouncing back from wildfires. Additionally, due to the extended recovery period, utility revenues and property values are seen to decline in these communities leading in many cases to a downgraded credit rating. The negative effects are essentially multiplied as agencies face reduced borrowing power precisely at the time when infrastructure spending is needed for a replacement system.

Given that the low-cost of less-resilient pipes helped lead to widespread adoption, the resulting Resilience Shift primer would describe how a resilience-focused cost benefit analysis that takes into account expected recovery periods and complete replacement costs following wildfires may pull this “lever” in a different direction and incentivize water agencies in fire-prone areas to adopt more resilient materials. Furthermore, the role of credit ratings, government subsidies, industry standards, and building codes could be addressed in the primer as additional incentivizes which could be leveraged to encourage the use of resilient water pipe materials in fire-prone regions.

In effect, this primer would provide tangible and practical information for the water supply sector as well as specific actions which could be taken (e.g. resilience-focused cost benefit analysis) to better integrate resilience into future capital investment decisions.