

How regulations are helping the UK be more Resilient

All corporates are looking to grow and evolve their business but it is now recognised that there may be capacity limits to such growth. These limits – such as natural resources – may disrupt such plans for growth in the future. Not understanding these limits, their associated risks and opportunities, may mean that an organisation does not positively address the challenges of a growing population, trying to live well on a finite planet, new operating environments and how to build the resilience and long term sustainability of the organisation. An emphasis on ‘good growth’, growth that is inclusive of societal and environmental needs, delivers resilience to the business, its business model and its associated operations. As organisations become more vulnerable to change and uncertainty as they become more complex, virtual and interdependent, there is growing awareness at CEO level of the need to enhance the capabilities, tools, and approaches needed to make investments in risk management effective and to measure the factors that contribute to long term resilience and sustainability.

Historically, the focus of resilience in the UK, as in many places across the globe, has been on creating robust communities and businesses to react and respond to short term disruptions. As a general rule, and referring specifically to emergency preparedness and building resilience to short term disruptions, UK Government will point practitioners towards and recommend relevant Standards, but stop short of mandating their uptake. This approach provides some flexibility in the way industry chooses to build resilience but also gives Government a framework through which to drive improvements in the way disruptions are planned for. The UK Government has a close interest in supporting organisations in becoming more resilient. Standards, the dissemination of good practice and the use of legislation where practical and relevant play key roles in satisfying these interests.

Some normative Standards such as BS 25999, now ISO 22301:2012 Societal security – Business continuity management systems – Requirements¹, are explicitly identified in Government guidance, itself linked to statutory duties. Experience has shown that making this link explicit has enhanced uptake and effect in this field.

Climate Change- the impact on the Private Sector

Climate scientists’ projections suggest businesses will experience huge levels of disruption during the coming decades as rising average temperatures, the increased incidence of extreme weather, rising sea levels, and changing weather patterns unite to impact infrastructure, buildings, agricultural production, supply chains, and geopolitical relationships.

Any organisation with interests in areas where climate risks are perceived to be at the highest could face even greater climate risks than domestic assets with increased supply chain disruption, calls for humanitarian intervention, and food price volatility.

Organisations should be exploring the Board’s perception of this issue. We present three questions to ask your Board:

Question one (Climate change)

Does your organisation understand the risks to your assets and operations associated with the physical impacts of climate change?

Question two (Resource scarcity)

Has your company considered its resource requirements in response to its growth strategy or to potential changes in the availability of resources?

Question three (Labour standards & human rights)

Have you developed policies and procedures to ensure that all employees and contractors are treated fairly?

In other areas, good practice standards (i.e. those that are indicative rather than prescriptive) are the preferred approach. Experience of developing BS 11200 Crisis Management – Guidance and good practice² demonstrates that they are an effective complement to Government policy in the resilience field, and are relevant to many in a way that Government guidance would not be able to achieve.

However, to be truly resilient, businesses and countries need a much longer term and broader focus to their activities. There is a clear link here between the resilience activities associated with managing disruptions and the wider focus associated with the Sustainability agenda. The combination of these disciplines allows organisations to consider how best to operate and thrive in a changing external environment, to better understand how environmental, fiscal and economic issues impact on organisations, allowing a better assessment of how resilient operations and supply chain might be. The UK Government is playing a key role in this debate. By leading the development of BS 6500 – Guidance on organizational resilience³ and putting Sustainability at the centre of energy, water and food security strategies, Government is encouraging business to make a clear and tangible link between short term preparedness and long term readiness

Enterprise resilience

Boosting your corporate immune system

Resilience is defined as the ability of an organisation to protect against, or adapt to, short or long term change. In today's business environment any organisation lacking this ability is only likely to survive as a result of luck.

Resilience is a wise investment Many organisations spend more on insurance than they do on resilience but this balance is all wrong. Companies are unlikely to get a full payout from your insurers and no amount of money can salvage a damaged reputation or regain customer trust. Investing in resilience offers a better rate of return and enables you to enjoy a payout, irrespective of whether something bad happens.

Resilience equals success The last decade has seen countless examples of businesses brought to their knees by a lack of foresight or poor management of crises. 'Black swan' events have exposed the shortcomings of traditional risk management, putting resilience at the top of board agendas. Yet many are still not making the connection between resilience and success. While it's possible to survive in the short term, it's a fundamental pre-requisite for success over the longer term.

Expertise is missing Many organisations are making lazy investments as a result of ill thought-through decisions. They lack the capabilities, tools and approaches needed to make their investment in resilience effective, and too few understand or measure the factors that contribute to their resilience long term. Are these gaps you need to fill?

Resilience requires your business to evolve continuously, protected from shocks, while at the same time being able to adapt and maintain competitive edge. Tension can exist between being resilient and being agile and sometimes protection comes at the price of agility. Balancing these two needs can be challenging. The challenge for leaders is to step back, step up, be savvy and take action.

Everyone needs to be pointing in the same direction Organisations need to understand what really matters, getting the different organisational functions to work together better and creating a shared understanding of what resilience means.

Resilience can be measured It makes good commercial sense to be resilient. The factors that define what makes an organisation resilient can be identified and measured. Yet few monitor or measure it on an ongoing basis by building robust metrics into their KPIs.

Case study: UK Water Services Regulation Authority (Ofwat) resilience guidelines : Helping the UK respond to Severe weather and Climate Change

Following the widespread and serious flooding in England during June and July 2007, Sir Michael Pitt conducted an independent review of the way the events were managed. The final report - The Pitt Review: Lessons learned from the 2007 floods - was published in June 2008. The Pitt Review was a comprehensive appraisal of all aspects of flood risk management in England and detailed 92 recommendations addressed to the Government, service providers, insurers and the general public to enhance resilience in communities to flood risks.

The flooding in 2007 exposed the high level of vulnerability to flooding of vital nodes of UK infrastructure. In Gloucestershire alone, the flood damage to the Mythe water treatment plant left 350,000 without water supplies for 17 days and damage to electricity distribution assets cut off 40,000 people. What also came to focus in the Pitt review were the near misses: a single substation in Wales came close to failure, which would have cut off 500,000 people in Gloucestershire and Wales, and a dam which was almost breached would have threatened the M1 north south motorway corridor.

It is in the context of the aftermath of these events that the Pitt Review was commissioned. The recommendations included:

- The development of a 25-year plan to address the issue of flooding, together with the establishment of a dedicated Cabinet committee
- An overhaul of building regulations for homes built or refurbished in flood-prone areas
- Building and planning controls that govern development in flood risk areas and measures that can be taken to make properties more flood resilient
- A joint nerve centre run by the Met Office and the Environment Agency to enhance the accuracy and effectiveness of flood warnings systems
- Definitive electronic mapping of all drainage ditches and streams, with clear allocation of responsibility for maintenance
- Better preparation by the public – warning and informing systems, education and awareness campaigns and further supporting materials
- A national flood simulation exercise at the earliest opportunity to test new procedures

Since the Pitt Review, significant progress has been made to target these key areas. This in turn has influenced and shaped further Standards and regulations focused on emergency preparedness and disaster risk reduction. Examples include:

- **The Flood and Water Management Bill became an Act (2010)** providing for more comprehensive management of flood risk and safeguarding community groups from

unaffordable rises in surface water drainage charges and protects water supplies to the consumer.

- The **National Flood and Coastal Erosion Risk Management Strategy** (2011) for England and statutory guidance on co-operation and requesting of information. The Strategy sets out a statutory framework that will help communities, the public sector and other organisations to work together to manage flood and coastal erosion risk. It will support local decision-making and engagement in flood and coastal erosion risk management, making sure that risks are managed in a more co-ordinated way.
- The **National Flood Emergency Framework** (2010)provides guidance and advice for councils and other emergency services on planning for and responding to floods. The Framework is a 'one stop shop' reference point on flood planning.

Whilst the progress towards increasing resilience can be hard to measure in the short term, some examples can be drawn from the performance of infrastructure across the UK during the recent flooding and weather events in December 2013 and January 2014. The defences in place on the East coast of the UK meant that a North Sea surge event in December 2013 caused only minor disruptions. Whereas a similar magnitude surge in 1953 resulted in catastrophic infrastructure damage and the loss of over 300 lives. In the West of the country, although several train lines were affected, damage to other infrastructure was minimal.

In addition to the introduction of legislation and the development of frameworks addressing multi-agency collaboration in planning, response and public awareness as noted above, the Pitt Review placed emphasis on the investment made by utility companies to protect key infrastructure sites. This included infrastructure such as electricity sub-stations and the involvement of utility companies in flood defence planning in order to build greater resilience into the system to minimize disruption during and after a crisis event.

The **Water Industry (Schemes for Adoption of Private sewers) Regulations 2011** is a key example of how sustainable and secure water management can be regulated. This regulation provides customers with the assurance that a regulated company is responsible for maintaining and repairing the sewerage system serving their property, which works to minimum standards of service and is overseen by Ofwat. In addition, the current **Water Bill 2013-2014** aims to increase competition in the water sector and improve resilience to flooding, drought and other environmental threats. Combined, these regulations will give Ofwat a new over-arching duty to secure the long-term resilience of water supply and sewerage systems in the context of environmental, population and behavioural changes.

Ofwat have produced a paper OFWAT Mott MacDonald, 'Resilience - outcomes focused regulation Principles for resilience planning', May 2012. The Paper sets out principles for resilience planning, together with examples of available evidence and of different resilience planning practices. The report builds upon the Service Risk Framework for flood hazards that was prepared by Halcrow for Ofwat in 2008 and the Cabinet Office guide – "Keeping the Country Running: Natural hazards and Infrastructure" – published in 2011.

The principles set out by Ofwat are intended to help companies to prepare effective resilience plans in the future..

Ofwat defines resilience ²in relation to individual assets, systems of assets, or services. In their report the focus of resilience is on outcomes, primarily in terms of resilient services for customers and maintenance of a safe environment. Although the report focuses particularly on resilience to natural hazards, the principles have been developed at a high-level and could potentially be used for managing wider risks thus allowing companies to adopt an 'all-hazards' approach to resilience planning. ²

The key issues that Ofwat has considered in developing the principles for resilience planning are: ²

- The definition of resilience
- Governance of resilience
- The role of standards and risk management in resilience planning
- The role of avoided resource costs (including avoidance of both economic and human losses) in cost-benefit analysis
- Definition and measurement of outcomes for consumers and the environment
- How resilience planning aligns with other water utility company planning processes
- Consumer's engagement in resilience planning ²

Nine principles for resilience planning have been developed by Ofwat, which are:

- 1. An all-hazards approach to resilience planning*
- 2. Proportionate resilience strategies embedded into corporate governance*
- 3. Third party engagement*
- 4. Resilience planning focused on risk to service outcomes considerations*
- 5. Customer preferences and environmental acceptability for different levels of resilience interdependencies*
- 6. Broad consideration of intervention options for resilience*
- 6. Using cost benefit analysis to support significant decisions*
- 7. Preparedness for response and recovery*
- 8. Continuous improvement in resilience planning ²*

Source: OFWAT Mott MacDonald, 'Resilience - outcomes focused regulation Principles for resilience planning',

It is the responsibility of the water companies in the UK to measure how resilient they are, and work with the guidelines that the regulator has set. Ofwat have not set specific procedures around how to measure resilience. PwC have developed a tool to assist their clients in the private sector on how to measure and benchmark their resilient functions. The *Operational Resilience Benchmark*⁴ is a framework for measuring resilience. The framework allows the private sector to use integrated reporting in their risk management functions taking into account areas such as community resilience and finding opportunity in regulatory change. This encourages organisation to think of themselves as an integral part of their environment, as suppose to a transactional relationship.

The *Operational Resilience Benchmark* is a method of reporting resilience in an integrated manor. The framework that sits behind the benchmark has assisted water companies measure their resilience against the guidelines set by the regulator Ofwat. Outputs of integrated reporting include:

- Board's aligning their risk management functions
- Development of a resilience strategy
- Integration of Business Continuity with other key protection functions (Crisis Management, Risk, IT Recovery) in order to create one consistent framework and approach.
- Organisational Behaviour as a key factor that underpins resilience preparations.
- Focusing on hot topics such as Sustainability ensures that reporting is cutting edge and in tune with new risks.
- Disaster Risk Reduction programmes show how your organisation is positioning itself in a community and how this will provide shared protection against natural disasters.
- Measure against ISO standards such as BCM, Crisis Management, emergency management

To measure resilience, organisations will need to measure the effectiveness of all arrangements across the organisation. *The Operational Resilience Benchmark*⁵. Reviews functions such as

- Crisis management
- Governance
- Risk management
- Treasury
- Sustainability
- Regulatory Response
- Culture and behaviours
- Third Party Trust
- Business Continuity

The benchmark can be used to assess how well the organisation is performing, set targets and provide a reporting mechanism. A typical output is shown below providing the overall results (3) which can be broken down in to individual functions (3.1) and questions asked (3.2)

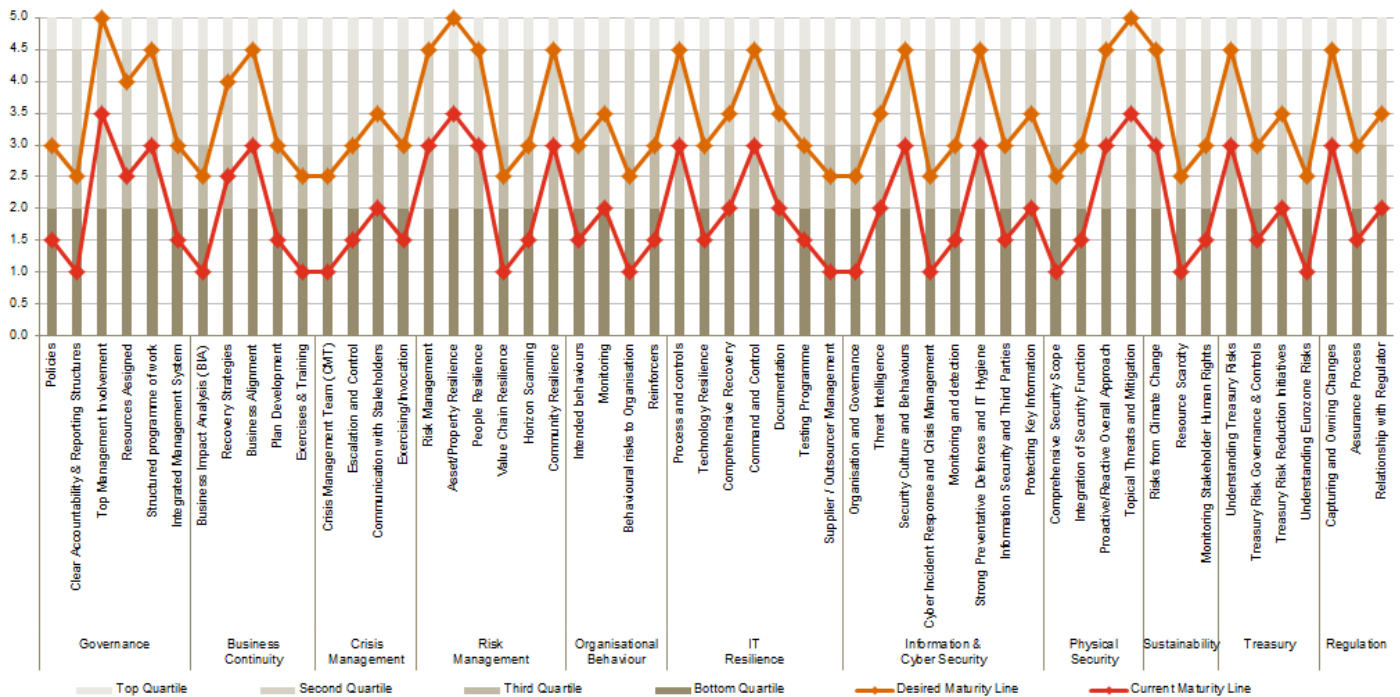


Figure 3: Operational resilience benchmark outputs (Source: PwC)



If you have any technical questions or concerns, please contact via e-mail: mark.f.helferty@uk.pwc.com.

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Figure 3.1: Results breakdown for Sustainability (Source: PwC)

Ref	Question	Answer	Score
1	Accountability - How does your organisation ensure that all regulatory obligations have been captured and accountability for meeting regulatory requirements has been assigned in all cases?	We have performed an exercise to capture all regulatory obligations impacting the organisation and we have an established a formal process for maintaining this list and assigning accountability. This is independently reviewed on an annual basis.	High
		It is the responsibility of each department to be aware of their regulatory obligations and to ensure they are meeting these.	Low
2	Assurance - What assurance is in place for meeting regulatory obligations, including regulatory reporting requirements?	An assurance map following the three lines of defence assurance model is prepared and independently reviewed on an annual basis. This uses a formal risk assessment methodology to identify the regulatory obligations presenting the highest risk to the business. Based on the level of risk an assurance plan is developed and performed each year.	High
		There is no assurance activity in place.	Low
3	Horizon Scanning – What process does the organisation have for identifying external and internal events that may increase or decrease regulatory risk?	Regular review of internal and external intelligence to assess regulatory hotspots and areas of focus by regulators e.g. review of media reports, emerging patterns of activity by regulators, whistle-blowing reports. This information allows early intervention.	High
		There is no process in place for horizon scanning.	Low
4	Building Trust - What approach does the organisation take to managing relationships with your regulators?	As an organisation we are focused on building trust with our regulators. We invest our time engaging with regulators e.g. sharing our opinion on potential regulatory changes and where possible we share information early and openly e.g. regarding a potential regulatory breach.	High
		Involvement with regulators only occurs by request from the regulator e.g. if being investigated.	Low

Figure 3.2 Regulatory Response- example questions and answers, operational resilience benchmark

With the recent national flooding incident over December 2013 to February 2014, it is becoming more critical that investments in national resilience are considered, however, organisational resilience is equally important to support national capabilities. By assessing their resilience areas on a regular basis, the water companies can:

- Provide an integrated overview of resilience
- Identify gaps and exposures in resilience arrangements
- Align the functions and divisions responsible for protecting the organisation
- Direct investment to areas of greatest need
- Highlight trends
- Understand where there may be issues.
- Assesses when further updates to the Resilience regulations are introduced, that the organisation is in a position to adapt and take advantage of these changes.

Conclusion

The world is getting riskier. Organisations are increasingly vulnerable as business becomes more complex, virtual and interdependent. Building and sustaining a resilient business is a commercial imperative. Your corporate immune system is what protects your business from illness – if it's in good shape and something strikes, you can shrug it off. Organisations that enhance their immune system are able to tackle challenges, fend off illness and bounce back more quickly.

At its core, regulation has an uncomplicated, even noble, purpose – to protect. Covering three key areas – public safety and welfare, industry and revenue generation – surely everyone would agree protection is a positive motivation.

Regulatory response reflects the level of control you have in your business. Successful businesses are those where the board has adopted a different mindset to regulation and control and, in doing so, created significant value and opportunity for their organisation.

It's time to look again at regulation and see it as a benefit and not always a burden. In a challenging business environment, where trust and transparency are highly prized, getting on to the front foot with your regulatory response with a well executed and communicated approach, can bring significant opportunities.

The case study demonstrates how regulation is helping create consistency across the water industry. The regulator protects the consumer, gives them faith in the quality of water they are drinking and commitment of continuing access to water.

Regulation makes the private sector more self-reliant which can help the company and the surrounding local workforce be more resilient when disaster strikes. This attitude and good practice could be capitalised on by communities so that victims become partners who they can support rather than save.

Not all regulation is equal –

some carries greater penalties and has greater impact. The distinction is key. Be clear what regulation matters now or in the future, at an enterprise as opposed to a functional level.

Keep an eye on the horizon It's understandable that regulatory focus tends to be on the here and now, however, keeping an eye on what lies ahead, deploying an early warning system and engaging with the regulator throughout your compliance journey, not just at the end, is key. This actively supports a better-prepared, and therefore more resilient organisation.

Behaviours need to be part of your DNA

Too often businesses try to meet regulatory requirements without embracing the people dimension. While this may not create any obvious issues in the short term, everyone has a role to play in controlling the business and you won't be able to sustain compliance if the right behaviours aren't part of your organisation's DNA.

Don't forget the data. The key to good reporting often lies in the quality of your data. You need to know what data matters and what systems and human intervention and impact data has on its journey to your reports. It's important to shift the emphasis from the report itself as an output, to the process and controls used to generate it.

Stakeholder trust is key. Greater consumer power has come with the rise of social media, making it harder for organisations to maintain their reputations and customer trust. Those that regulation seeks to protect now have a greater voice for their concerns and this is driving new regulation as a means of providing additional protection. Proactively communicating your regulatory performance – good or bad – to stakeholders can enhance your reputation and build trust.

¹ DEFRA (Department for Environment, Food and Rural Affairs). 2012. *The Government's Response to Sir Michael Pitt's Review of the summer 2007 Floods: Final Progress Report*. London, United Kingdom.

² See OFWAT Mott MacDonald, '[Resilience - outcomes focused regulation Principles for resilience planning](#)', May 2012.

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Emmeline is a member of PwC's Performance assurance practice and works with clients across the UK on sustainability and resilience related projects. Her clients include companies running National Critical Infrastructure. Outside of Emmeline's client commitments, she plays an active role in programmes and initiatives linked to sustainability . She has a particular interest in Disaster Risk Reduction, contributing to the United Nations' continuing efforts to support the world's most vulnerable communities, by participating in their Geneva conference on this topic. This led to an opportunity to become one of the PwC representatives at the National Dialogue for the Hyogo Framework for Action (HFA). The HFA is a 10 year plan to make the world more resilient to natural hazards.

Emmeline has guest authored a chapter in Incisive Media's latest book which focuses on resilience. Emmeline's piece explored the concept of 'good growth' i.e. that which is inclusive of societal and environmental needs, in turn delivering resilience to the business.

In addition to her external activities, where she has been fortunate to work alongside some of the most respected people in their field, she takes a proactive approach within PwC, most recently developing a resilience benchmarking tool which is already creating exciting new opportunities for the firm and which led to her being shortlisted for an innovation award as part of the European BCI Awards 2013. Emmeline also successfully nominated the Risk Assurance Enterprise Resilience proposition as a PwC Global Innovation Spotlight, securing funding to promote it and encourage its roll out across the PwC global network.