



Global Platform for  
Disaster Risk Reduction  
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## Business for Resilience

*ARISE is the private sector initiative of the UN Office for Disaster Risk Reduction (UNISDR). Its main role is to mobilize business in support of the goals of the 2015 Sendai Framework. This is **ARISE's manifesto for action for the 2017 Global Platform** in Cancun, Mexico.*

### Executive summary OUR KEY MESSAGES

- Recent years have seen a significant increase in disasters; economic losses from disaster are now running at close to \$300 billion a year with this being a very conservative estimate. Urbanization is adding to this risk – by concentrating populations and economic activities.
- These rising losses are putting severe strain on public finances and, in many countries, acting as a brake on economic and social development.
- To tackle this issue, businesses are ready to work with governments, civil society and other stakeholders.
- As part of their corporate social responsibility and going concern, businesses today already invest for the safety and protection of people and communities. However, more longer-term, transformational investment is needed to further reduce risk and build greater resilience.
- For business to play its role fully in this, it needs the right environment – it needs policies, rules and regulations that support private sector investment and innovation over the long term.
- Business investment in resilience must be part of a comprehensive approach – that assesses all forms of risk, across public and private sectors, and emphasizes the importance of risk reduction, as well as disaster insurance.

This manifesto sets out 7 key proposals for reform – which, if adopted, we believe will enable business to play its role fully in helping reduce risk and build resilience to future disasters:

- **Apply the Build Back Better principle to all aspects** of planning, development, recovery and reconstruction – from building codes to government tenders and contracts.
- **Create incentives for businesses to invest** in longer-term risk reduction and resilience in advance of disaster. At the same time, remove legal and other regulatory barriers that prevent such investment or, worse, drive continued low-resilience investment.
- **Take a more holistic and integrated approach to upgrading key infrastructure** by engaging key stakeholders at national, state and local levels to better address requirements and drive more resilient capital investments.
- **Involve businesses before, during and after disasters** – to ensure private resources and expertise are mobilized in support of effective disaster risk management.
- **Promote the benefits of resilience to consumers** and **extend education and professional training** to help increase public awareness. Without this awareness, risk reduction and pro-resilience policies will be much less effective.
- **Harness the potential of data and technology** to ensure effective implementation of resilience and risk reduction measures.

## Introduction: *Increasing disaster risk*

In recent years, we've seen a sharp increase in disasters, both in their frequency and their severity. According to UNISDR, economic losses from disasters currently average close to \$300 billion a year<sup>1</sup>. With climate change, this trend is likely to continue, or possibly worsen, in the years ahead. These losses put significant strain on economies around the world, as well as on individual communities. Both public and private sectors have an interest in reducing disaster risk and building long-term economic and social resilience to future disasters.

Growing urbanization is effectively adding to this risk, by concentrating populations and economic value. By 2030 – the end of the period covered by the *Sendai Framework on Disaster Risk Reduction* – six in every ten people will live in cities. According to the World Bank, cities already generate 80% of global GDP. Urban investment will continue to rise sharply during the Sendai period; much of this investment will be in private housing, planned and unplanned.

In many countries, current measures do not go far enough to protect people, property, services or vital infrastructure, such as hospitals, schools, bridges and roads etc. As a result, many local populations struggle to recover from disaster. These vulnerable populations tend to be larger in developing countries, but it's clear significant vulnerable populations also exist within highly-developed economies.

The international community clearly recognizes the importance of these issues. Disaster risk reduction is at the heart not only of the Sendai Framework, but also the *UN Sustainable Development Goals*, the recent *Paris Agreement on Climate Change* and the *New Urban Agenda*, agreed last year at Habitat III in Quito. The Global Platform meeting in Cancun, Mexico, provides an ideal opportunity to increase cooperation in disaster risk reduction.

As members of ARISE, we believe the private sector has an important role to play alongside government and civil society. This manifesto sets out a series of proposals which, if adopted, we believe would help reduce the impact of disasters and help protect our populations and economies.

## Position and role of the private sector

Businesses themselves face a number of threats from disaster. These include storms, hurricanes and earthquakes, as well terrorism and the longer-term effects of climate change. Such disasters may damage business operations, disrupt local, national and global supply chains or, of course, put the lives and well-being of employees and customers at risk. Businesses must meet the costs of their own risk prevention, recovery and reconstruction.

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<sup>1</sup> Despite reductions in mortality, expected average annual losses worldwide from earthquakes, tsunamis, tropical cyclones and river flooding are now estimated at \$314 billion in the built environment alone. See UNISDR Global Assessment Report on Disaster Risk Reduction (GAR15): [http://www.preventionweb.net/english/hyogo/gar/2015/en/gar-pdf/GAR2015\\_EN.pdf](http://www.preventionweb.net/english/hyogo/gar/2015/en/gar-pdf/GAR2015_EN.pdf).

Disasters may also bring longer-term consequences – especially if a business is forced to relocate, or adapt to more structural changes in the market for its products or services as a result of social or economic dislocation. Businesses are also fragile – particularly smaller businesses. Even a few days’ disruption can cause cash flow problems or even closure; this has repercussions for employees, customers and suppliers. As a result, businesses increasingly recognize the importance of incorporating resilience and disaster risk reduction into both their operating models and their day-to-day decision making.

Businesses are vital to national and regional economies, not only as providers of products and services, but also as employers and investors. Often, smaller countries are dependent on a single business sector; in many smaller island states, for example, tourism accounts for as much as a third of the national economy. Consequently, businesses have a direct influence on a country’s ability to absorb disaster – to return to normal after the shock of an earthquake, flood or tropical storm. Given the right environment, businesses can be part of the solution in helping reduce risk and building long-term resilience:

- As providers of products and services to individuals, other businesses and to governments. These products and services cut across all sectors of the economy. They include building materials, manufacturing, utilities, insurance and other financial services, transport, consulting & advisory, and tourism.
- As employers – through training and education programmes for a business’ own workforce. These programmes may be directly in support of government initiatives. With larger companies, such programmes may reach a sizable number of people across different countries, or a high concentration of people within a particular area.
- As managers and customers – by taking measures that reduce risk and help a business’ facilities return to production more quickly after disaster. This may also apply to a business’ supply chain where it can extend best practice to other companies and SMEs. Many retail companies, for example, have excellent models for supply chain resilience. In the southern US, warnings of hurricanes trigger pre-shipment of building materials and generators to affected zones.
- As investors – both in new, innovative solutions and technologies, and in resilient infrastructure. Solutions could include monitoring /early warning systems, for example, or innovative engineering design. Greater use could be made of the private sector’s access to data or technology that allows detailed disaster risk mapping. With infrastructure, there is need for considerable additional investment in the years ahead – particularly in resilient housing (housing, typically, bears a significant share of the economic losses in any given disaster).

## **Working together to tackle disaster risk**

We can tackle the rising costs of disaster – but, to do so, we need business and government to work closely together. We need to create the right environment for investment and innovation, and for that investment and innovation to reach the scale required to meet increasing levels of disaster risk. This means working and acting together, as a matter of priority, in three key areas:

1) **To set out a clear, stable and effective policy framework that incentivizes long-term business investment in risk reduction and resilience.**

As far as possible, public policies should promote long-term investment in resilience. Businesses already invest to protect their employees, their premises and local communities. But public policies should incentivize businesses to go further – and turn resilience into a genuine competitive advantage. Resilience and disaster risk reduction should be built into public policies (including building codes, urban planning, rules on land use, tax policies etc.) In certain circumstances, we believe, governments should consider tax or other financial benefits. Regulations should not, inadvertently, increase risk or promote unsustainable solutions, as is sometimes currently the case. Regulations should also be stable over time and ‘enforceable’ – important if we are to secure long-term investment (especially in areas such as infrastructure). ARISE members are ready to work with governments and other stakeholders to address possible barriers to investment in current laws and regulations. Governments, in turn, have a role in ensuring effective compliance.

2) **To take a comprehensive approach to managing disaster risk that prioritizes, where possible, risk prevention and mitigation.**

To reduce risk effectively, we need an approach that takes in all policy options – from risk prevention /mitigation to risk transfer or insurance. Such an approach begins with a comprehensive risk assessment that allows both public and private sectors to determine first *what*, and *how much*, risk can be reduced (or prevented altogether) through targeted structural reforms. This risk assessment must cover different disaster scenarios, as well as the possibility of systemic risk (the risk that a single disaster may trigger a series of other events, including implications for public health). Both governments and businesses should also be aware that policy responses are interconnected – an effective government protection programme, for example, will inevitably reduce demand for private insurance and leave government carrying the risk; by the same token, insurance needs to be priced in a way that incentivizes risk prevention and mitigation. Business can support government and other stakeholders in this approach *before, during* and *after* a disaster – and should be involved from the earliest stage of preparation and policy-making through to post-disaster recovery and reconstruction.

3) **To raise public awareness of the importance of disaster risk reduction.**

Without this awareness and education, risk reduction and resilience policies will be much less effective. Governments can help through public education and engagement programmes, for example – and by setting clear targets, or sharing knowledge and expertise with other organizations in both business and civil society. Businesses can also support initiatives, through training and education for their own employees, suppliers, customers and other stakeholders.

## ARISE proposals for reform

We share the same goals as government. We support the objectives of the *Sendai Framework* and the *UN Sustainable Development Goals*. We want to prevent risk, reduce losses from disaster and help communities rebuild and recover quickly and effectively. As members of ARISE, we’re setting out proposals for reform (below) which, if part of a

comprehensive approach and supported by government, we believe, will bring about greater cooperation and help incentivize long-term private sector investment in resilience and disaster risk reduction:

<p><b>Apply the Build Back Better principle to all aspects of planning, development, recovery and reconstruction</b> – from building codes to government tenders and contracts.</p>	<ul style="list-style-type: none"> <li>• Rebuilding communities to pre-disaster standards is simply not good enough; it exposes these communities to continued losses from future disasters. Over time, Build Back Better saves money; a recent study in Queensland showed that, over a ten-year period, Build-Back-Better projects would save, through lower economic losses, approximately eight times the amount initially invested.</li> <li>• Where possible, <b>the Build Back Better principle should be applied both before and after disaster to all aspects of planning, recovery and reconstruction.</b> Build Back Better should be incorporated into government (re)building permits (allowing fast-tracking of projects that reduce risk and promote resilience). Similar requirements should also be built into government tenders and contracts for new housing and infrastructure; this should also apply to (re)construction funded by the UN. The construction industry should work closely with insurers to define minimum Build Back Better standards and extend the ‘insurability’ of housing and other key infrastructure. Insurance pricing should support Build Back Better by rewarding resilience and risk prevention, and reducing overall insurance costs, where possible, for lower-risk homes. <b>Build Better From the Start</b> is an important extension of the Build Back Better principle: communities that wait for disaster to develop tougher standards often find themselves hamstrung by tremendous post-disaster pressures; standards should be developed and implemented ahead of disasters.</li> </ul>
<p><b>Create incentives for businesses to invest in longer-term risk reduction and resilience in advance of disaster.</b> At the same time, remove legal and other regulatory barriers that prevent such investment or, worse, drive continued low-resilience investment.</p>	<ul style="list-style-type: none"> <li>• <b>Governments should look at specific incentives, particularly to encourage investment in resilient housing and new, more disaster-resilient technologies.</b> These may include tax breaks – or faster approval processes, as well as enforcing minimum standards in construction, land use etc. Such incentives should also be built into pre-disaster agreements with businesses (see below). At the same time, governments should remove legal and regulatory barriers that prevent such investment or, worse, drive continued ‘low-resilience’ investment. This may mean a trade-off in the short term with other benefits (including economic development, job creation, extension of tax base etc.)</li> <li>• <b>Regulators should also look at removing barriers to expanding insurance against disaster risk, particularly in vulnerable and low-income communities.</b> Governments, we believe, should support the InsuResilience target of 400 million people in emerging markets covered by disaster insurance by 2020, and consider setting a new target for 2030, in line with the period of the Sendai Framework. To reach this objective, governments could consider different solutions, including micro and index-based insurance.</li> <li>• <b>Governments and business should work together to increase resilience among small and medium-sized enterprises.</b> SMEs are the backbone of most economies, but often lack resources to make necessary changes. Businesses should do more to share knowledge and skills; and governments, we believe, should include SMEs in new, pro-resilience incentives.</li> <li>• <b>Financial services companies and government could help increase resilience by fast-tracking loans for home improvements or offering lower interest rates on projects such as shatter-resistant windows in</b></li> </ul>

	<p><b>hurricane areas, more secure roofs or the use of fireproof materials. Lower interest rates could also be extended to new housing with better, built-in resilience.</b> In lower-income communities, these loans could come in the form of micro-financing; this would help build resilience and safeguard livelihoods. Investment must be mobilized for increased disaster-resilient housing and other properties in the years ahead. Governments and business should look at innovative financing options, including more public-private partnerships.</p>
<p><b>Take a more holistic and integrated approach to upgrading key infrastructure</b> by engaging key stakeholders at national, state and local levels to better address requirements and drive more resilient capital investments.</p>	<ul style="list-style-type: none"> <li>• <b>Business and government should work together to plan infrastructure upgrades.</b> Currently, upgrades of water, power, sanitation, telecoms, roads etc. are planned separately – because key infrastructure is often owned by different operators. Instead, we would like to see upgrades planned in an integrated way – to ensure resources are focused on priority areas. Efforts should also be made to protect natural eco-systems that help reduce risk and provide ‘natural resilience’.</li> <li>• <b>Engaging key stakeholders from national to local levels to better understand requirements is essential to establishing investments which are scale-able, disaster resilient and fit for purpose.</b> Leveraging insights and inputs from multiple sources early in the planning and design phase helps optimize the nature of infrastructure investment.</li> <li>• <b>Disaster risk management should also be included across all areas of government spending, rather than in a dedicated budget.</b> Standalone budgets tend to be inefficient and often lead to money being redirected to other uses.</li> </ul>
<p><b>Involve businesses before, during and after disasters</b> – to ensure private resources and expertise are mobilized in support of effective disaster risk management.</p>	<ul style="list-style-type: none"> <li>• <b>Businesses should also be included in pre-disaster planning;</b> the insurance and utilities industries, for example, have considerable expertise in risk modelling and scenario planning. The logistics industry, meanwhile, regularly analyzes supply chains and other processes and plays a pivotal role in supplying food, shelter and medical assistance in the aftermath of disaster. This business expertise, knowledge and best practice, we believe, could be better used, alongside government and civil society, to ensure a more coordinated emergency response and – importantly – to build organizational capacity before disaster strikes.</li> <li>• <b>Business and governments should have pre-disaster agreements on how to allocate critical materials, equipment and other resources in the wake of a disaster.</b> Currently, there are too many obstacles to business and government working together in disaster response, which means private resources are often under-utilized. Proper planning, as part of these agreements, would also help limit losses, and by including pre-agreements on pricing for vital services, businesses could concentrate on recovery.</li> <li>• <b>Cities, government, civil society and business should be encouraged to share knowledge and data, where possible.</b> This includes data models, forecasts and impact analysis, as well as providing ‘raw data’. Key areas would be urban planning, infrastructure and security (critical flows of materials /energy consumption etc.) The <i>UN City Disaster Resilience Scorecard</i> provides an overall assessment of</li> </ul>

	<p>resilience – and a platform for business and government to work together on possible solutions<sup>2</sup>. Similar scorecards could be developed in other areas – in tourism, for example.</p> <ul style="list-style-type: none"> <li>• <b>An international volunteer team should be set up to provide emergency assistance to tourist sites and resorts affected by disaster, and to begin work on recovery and reconstruction.</b> This team could be developed jointly in cooperation with international, regional and local tourist organizations.</li> </ul>
<p><b>Promote the benefits of resilience to consumers and extend education and professional training to help increase public awareness. Without this awareness, risk reduction and pro-resilience policies will be much less effective.</b></p>	<ul style="list-style-type: none"> <li>• <b>Business should do more to market the advantages of resilience to consumers.</b> More ‘resilient’ housing, particularly in vulnerable areas, helps protect families and possessions. In tourism, a ‘value proposition’ could be created – to attract tourists and visitors to ‘disaster-resistant’ sites and resorts (e.g. ‘monsoon-resistant hotels’, ‘resilient’ conference centres, beaches, zoos etc.)</li> <li>• <b>Current courses in emergency management usually cover the period during and immediately after a disaster; they should be extended to pre-disaster and longer-term post-disaster recovery.</b> Content can be developed for use in both the public and private sectors. Build Back Better /Build Better From the Start principles could also be included in university and college courses. In addition, government and business should support further engineering research, particularly into earthquake and flood risk, given the predominance of informal settlements in moderate-to-severe seismic and flood-prone areas. Business could also provide training to public sector professionals in disaster preparedness, risk management and business continuity (as well as universities and other stakeholders); this could be backed up by a certification process and in-person or online events.</li> </ul>
<p><b>Harness the potential of data and technology to ensure effective implementation of resilience and risk reduction measures.</b></p>	<ul style="list-style-type: none"> <li>• <b>ICT should play an important ‘enabling role’ in disaster risk reduction and resilience.</b> Among the priorities would be to allow better data-sharing, where possible, including energy flows, transport patterns and readings from building and infrastructure sensors (currently, building operation systems tend to work in isolation). Cities and government should take advantage of more systematic tools already developed by industry; these tools are designed to enhance resilience, improve planning, design and management of infrastructure, and protect urban software systems against security threats.</li> </ul>

<sup>2</sup> The *UN City Disaster Resilience Scorecard* was developed with the support of IBM and Aecom. It’s recently been updated to include the UN’s local urban indicators. The latest edition will be unveiled in Cancun during the Global Platform meeting. More than 30 cities worldwide have completed the scorecard. The scorecard allows cities to track their performance over time and, more importantly, to identify priority areas for action and improvement. As members of ARISE, we encourage cities to use this scorecard.

## Appendix

### Role of ARISE (Private Sector Alliance for Disaster Resilient Societies)

ARISE is the UNISDR's private sector initiative. Its goal is to bring business together with the public sector and other stakeholders, to encourage partnerships and knowledge-sharing, and to help deliver on the objectives of the *Sendai Framework for Disaster Risk Resilience*. ARISE has more than 140 members companies – from around the world. ARISE works through a number of national and regional chapters; the most recent, in Canada, was launched in March this year. ARISE members are currently working in a number of areas, including disaster risk management, investment metrics, benchmarking and standards, education and training, legal and regulatory, urban risk reduction & resilience, and insurance. All ARISE members have signed up to five basic commitments in support of the Sendai Framework:

1. To raise awareness with respect to disaster risk and mobilization of the private sector
2. Exercise influence in their respective spheres of expertise
3. Share knowledge and bring in expertise of the private sector
4. Be a catalyst to generate innovation and collaboration
5. Implement tangible projects and activities to achieve the targets of the Sendai Framework.

ARISE has representation across different sectors of the economy. Each of these sectors has a contribution to make to disaster risk reduction, depending on its areas of activity, its products and services and its knowledge and expertise.

### Overview of ARISE proposals by sector

#### Construction, infrastructure & utilities

- Incorporate Build Back Better /Build Better From the Start principles into all aspects of planning and construction, including building codes, minimum standards for materials etc. Ensure codes and standards protect both lives and buildings
- Extend principles to building permits as well as government contracts and tenders
- Make sure principles apply to UN-funded reconstruction and that there is effective compliance /enforcement
- Introduce fast-track approval for construction /reconstruction projects that help reduce risk and build resilience
- Define minimum standards of 'insurability' to improve compliance standards and expand access to insurance
- Consider incentives to encourage investment in more resilient infrastructure, including financial benefits, tax advantages etc.
- Market benefits of more resilient housing – better protection for residents and their possessions, and lower, longer-term costs

- Work closely with utility companies to plan infrastructure upgrades, so priority areas can be better targeted

### **Education, training & R&D**

- Consider campaigns to increase public awareness of the importance of resilience and disaster risk reduction – campaigns could also focus on easy-to-take steps for citizens to enhance their own resilience
- Include Build Back Better principles in university and college courses
- Extend principles to professional training programmes; work with business and civil society to develop relevant content
- Ensure courses /training in emergency management cover all aspects of disaster management before, during and after disaster
- Support more engineering research, particularly into earthquake and flood risk (given size of vulnerable populations currently living in high-risk seismic and /or flood-prone areas)
- Set up joint training programmes with private and public sector professionals in disaster preparedness, risk management and business continuity to encourage greater cooperation; introduce certification for such programmes

### **Finance & financial services**

- Make home improvement loans more attractive through lower interest rates or faster approval for projects that increase resilience /reduce risk
- Encourage micro-financing for home loans, particularly among lower income or vulnerable populations

### **ICT & data**

- Ensure proper sharing of data between government, business and civil society (data on transport use, energy consumption etc.)
- Use UN City Disaster Resilience Scorecard to identify key areas of weakness and vulnerability

### **Insurance**

- Include insurance in a comprehensive approach to risk management, which also emphasizes the importance of risk reduction and prevention
- Involve insurance companies in pre-disaster risk planning; use their risk assessment models to help pinpoint key risks
- Expand access to disaster insurance among vulnerable populations by removing, where possible, regulatory and legal barriers
- Set clear targets for insurance take-up among vulnerable populations
- Encourage development of more innovative forms of insurance, including micro- and parametric insurance, as well as sovereign programmes

- Examine ways of using insurance pricing to encourage investment in resilience by individuals and businesses

### **Logistics, transport and emergency response**

- Introduce specific pre-disaster agreements with business covering use of critical resources during emergency response
- Ensure logistics companies are closely involved in all aspects of pre-disaster planning to ensure distribution of critical relief and other supplies
- Work with logistics and transport companies to build and maintain more efficient supply chains, and increase organizational capacity so governments and leading NGOs can respond more effectively to disaster

### **Manufacturing**

- Agile supply chains which can plan and respond to shifts in demand
- Transparency across the end-to-end distribution model to manage the critical path
- Capital investment of manufacturing sites within the network are made with a resilient mindset so they can operate during disaster periods
- Distribute risk within the manufacturing footprint to allow for shocks
- Critical raw materials have multiple sources of supply and buffer stock
- Teams are cross-functionally trained and operational decisions can be made by pre-defined management reporting lines to reduce disruptions and anxiety
- Health and safety policies have specific disaster response plans

### **Retail**

- Work with local communities to conduct impact analysis from potential disasters
- Transparency across the end-to-end supply chain to distribute stock and forward-plan
- Apply analytics to determine must-have products (in what form, and when)
- Train store staff on disaster management principles and response
- Work collaboratively with key suppliers to plan for major disruptions
- Leverage frontline learning across different disaster sets to incorporate in staff inductions and store training
- Establish and drive industry best practices to work with other retailers during such incidents
- Establish forward planning centers and educate local community on the plan
- Have flexibility in the distribution network to facilitate deliveries and allow flexible delivery schedules
- Core lines must always be in stock with slighter greater stock buffer
- Establish flexible working arrangements with staff to allow for round-the-clock support
- Establish clear focal points and management response plan during any disaster

## **Tourism**

- Set up international volunteer team to provide immediate assistance to tourist sites and resorts affected by disaster
- Put in place a scorecard system to measure resilience and help target resources within tourist sector
- Market the benefits of resilience, attracting more tourists to better-protected sites and resorts