

Submission to the public consultation of the Draft National Risk Assessment (NRA) 2021/2022 (Sept 2021)

Risk Assessment

The listing in the NRA of risks as individual events fails to account for the increasingly integrative (concatenating) nature of our emerging risk environment. For example, we will continue to face growing drivers of risk, including from climate change; energy supply constraints and disruptions; multi-dimensional constraints to global food security; escalating indebtedness and a vulnerable credit system; polarization and hostility within and between nations. These are not necessarily independent. For example:

- Constraints on economic growth and growing forward-looking uncertainty, arising from the impacts of climate change, pandemics, inflation/ deflation, energy stresses/ shocks etc. will put increasing pressure on an already vulnerable global financial system.
- Growing constraints on global economic growth (incl. for reasons listed above) will
 challenge societies habituated expectations, and increase pressure on social cohesion and
 international cooperation. This would increase the likelihood of coordination failures,
 disruption to the democratic nature of states, cyberattacks and wars.

The above drivers of stress and shocks are interacting through more vulnerable societal systems. These interdependent systems include critical infrastructures, supply-chains, the financial systems, and human behavioral coordination. The structure of the societal systems upon which we depend mean that:

- No country/ critical infrastructure can be truly resilient as the conditions upon which they
 depend are global and opaque. For example, a war between China and Taiwan, or between
 Saudi Arabia and Iran could have profoundly destabilizing global impacts due to impacts on
 supply-chains, financial systems, and energy supply.
- The complexity, interdependence and speed of societal processes means there is greater exposure to non-linear cascading disruption.
- Increasing scale and/or compounding of stress/ shocks have a non-linear impact on society.
- Growing likelihood of more frequent sequential impacts on society of on-going stress and repeated shocks (from whatever sources) can make society increasingly vulnerable to the next crisis.
- Countries/ regions can pass socio-economic tipping points due to a mix of shocks/ stress/ declining resilience. This can cause cascading failure of societal infrastructures.

Given the outlined discussion above, it may be useful to not just consider risks as individual events, but refer to **Emerging Risk Environments**, that are characterized by: *the implications of a growing array of intensifying stressors and sources of shock interacting through increasingly vulnerable societal systems*.

One outcome from this integrated perspective is that disruption to lifeline systems in Ireland is both of greater likelihood and impact than siloed analysis would suggest.

Implications for Ireland

- Thinking the Unthinkable: We need to be open to the idea that we are entering a fundamentally new and considerably more dangerous risk environment. Our current risk management practices and institutional structures evolved in, and are adaptive to historical risk conditions, not the risk environment we may be entering.
- In broad strokes, Ireland is exposed to increasing geographically local risk, and an increasing likelihood of exposure to global risk transmitted through our interdependencies.
- We need to prepare for chronic weak growth and increasing disruption; large-scale systemic shocks and recovery; and large-scale systemic shocks with non-recovery.

Some Additional Comments

- It is a well understood feature of human behavior that we are reluctant to anticipate and prepare for risk that lie outside our experience, do not reflect the general consensus, and threaten established norms and institutions. This is not to blame, but to make explicit that the cost of this tendency is escalating.
- We have discussed emerging large-scale systemic risk environments with senior stakeholders in various countries and institutions, including in Ireland. There is an understandable fear of bringing such issues before the public. There are risks to doing so, but they are outweighed by the costs. Good communication can help.
- Contingency planning has been seen as state-led, top-down and rather secretive. Initiative
 from other should be encouraged. There are already civil society groups across the world
 working on resilience and preparedness. For example, RASDA are working with communities
 and organizations in Ireland during September/ October 2021, supporting EarthEx 21, an allsector exercise developed by the Electric Infrastructure Security Council
 (www.eiscouncil.org).
- It is presumed that there is an annex to the NRA, where the risk of a severe systemic shock and/or the collapse of the global financial system is discussed- particularly as our emerging risk environment is increasing that likelihood, and the impacts would be globally catastrophic.

Recommendations

(1) Vulnerability Focused Resilience and Preparedness

It would be impossible to characteries every source of hazard(s) and their interactions. However, many have a common impact: they disrupt the flow of goods and services in society (food, energy, communications, inputs to industry, farming, supermarkets etc.) and/ or they put people in perilous physical predicaments (flooding, say). There are many ways to support resilience and preparedness for these things, that are independent of particular hazards. Such an approach would provide a common foundation for Whole-of-Society approaches.

(2) Irish Resilience and Contingency Agency

Some countries already have large preparedness infrastructure, such as the Swedish Contingency Agency (MBS), and the mix of United Stated agencies (FEMA, Homeland Security etc.). A robust

institutional foresight, resilience and preparedness agency is needed to reflect our emerging risk environment. The MBS employs about 500 people, to give a sense of scale.

(3) Whole of Society Preparedness

It is increasingly acknowledged that as risks become greater in scale, frequency, and duration, citizens, communities, public and private sectors will need to contribute to collective resilience and preparedness. Whole of Society approaches are increasingly a feature of planning in Nordic countries. Well thought-through initiatives can give people a sense of agency and purpose, while supporting social cohesion- a powerful source of resilience in itself.

(4) Financial System at Systemic Limits

It's a very sensitive issue, but the Irish Central Bank, and the Euro Group need to discuss the implications of persistent constraints on economic growth coupled with escalating systemic volatility. They should discuss this with a wider group of expertise than usual, particularly those with a systems/ complexity perspective who understand energy in non-equilibrium systems.

Contribution Background

Further Details, References, and supporting materials are available from the author.

RASDA (Responding to Anticipated Systemic Disruption Alliance)

RASDA is a new Irish-based organization that is working to support a whole-of-society process that is building resilience and preparedness as societies face a world of escalating risk and uncertainty. More information can be found at: www.rasda.ie

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