Dealing with Surprises and Unconventional Crises

Workshop report (Washington DC, 1 July 2009)

The idea for this workshop grew out of the discussions held in IRGC's 2008 governmental forum on crisis management and national risk assessment, and is linked to its projects on Risk Governance Deficits and Emerging Risks. The main aim of the workshop was for IRGC to engage in a loosely structured conversation on the topic, with a view to deciding whether or not to embark on project work on how to approach crisis management and foster a deepened understanding of, and strategies to deal with, unconventional crises.

The workshop moderator, Prof. Todd LaPorte of UC Berkeley, had prepared background notes outlining the main premises for the discussion: the current institutional set-up (e.g. institutionalisation of expertise, educational homogeneity of experts) has made it less likely that senior decision-makers will learn about or acknowledge that they are facing an unconventional crisis *and* that their response will be inappropriate as it will be based on past, known emergencies.

Initially, participants discussed the ***probability and nature of disruptions in the coming decades***, including issues such as climate change, pandemics and ecosystems.

- It was noted that while development leads to increased knowledge and understanding that can help us anticipate unexpected crises, it also causes potential new surprises.
- The amplification potential for many risks has also increased. Media was identified as a major amplifier of disasters. Information no longer comes from relevant managers, but from media, and institutions do not have the capacity to cope with the media's expectations.
- One problem is the focus on risk assessment as opposed to risk management – for this focus to shift, communication of risk assessment results to decision-makers is necessary for effective risk management.
- The moderator noted that denial of responsibility by management can also be a strong amplifier. Current analytical frames and assessment methodologies make it worse, because decision-makers are not exposed to a sufficiently wide range of points of view.
- A related problem is limited access to decision-makers – advisors keep them well protected and it is difficult to reach and provide new knowledge. It is important to include people in the process who can bring in new thinking and responses.

One participant felt that we should simply acknowledge that we do not know what will go wrong next, and thus focus on:
1) Organisations and their behaviour. However, anticipation and preparation require resources, and it is inherently difficult to allocate funds to something unknown.
2) Planned adaptation. Need to plan on being surprised (although oxymoronic) and potentially being wrong. (But a problem would be that large organisations need standard operating procedures.)

What investments are needed to avoid future surprises?

One participant's view was that the frequency of surprises will increase if we do not develop methods to anticipate them (thinking the unthinkable). We have built systems that are more complex than before, but we can also make them more resilient, robust and adaptive by using the positive elements of complexity. However, there is a tendency to stress systems so that problems cascade. The possibility of cascading effects is often both ignored, and not communicated to the public (e.g., the electricity grid is under stress and could face a break-down, but a 'lowest-price-promise' is sent to the consumers).

UK experience shows that exercises are important to ensure that people who need to work together in a crisis situation know each other beforehand. The importance of mobile telephony was evident during London 7/7 (when mobile networks jammed and disturbed emergency operations because people were calling each other). The issue of human behaviour in crisis situations also has to be considered, because people do not necessarily act rationally or according to plan.

It was noted that definitions varied; some events are considered crises because they are novel events (e.g. BSE), others due to their scale (e.g. hurricane Katrina). In addition, crisis management is based on different criteria, e.g. in the UK, it centres on number of fatalities, irrespective of cause.

If we imagine that the frequency and intensity of some kinds of disruptions will increase and will be novel: What needs to be added to our analytical frames?

- One representative of a government agency in charge of national security said that the uncertainty of the analysis, and the variables used, are stressed in their reports to decision-makers. Scenarios were a frequently used tool.
- One view was that it would be much more valuable to focus on implementation, and not on analysis or a new framework etc. ("It is inconceivable that we will anticipate everything.")
- Another was that the road to dealing with surprises was to increase the robustness of the system by learning to better deal with known knowns.
- The EPA was mentioned as an example of an organisation that had a functioning analytical frame for disasters, which could be built upon by others.
- Resources are necessary. Most institutions do not have the resources (enough people) to respond. The exception would be the military e.g., Thailand after the tsunami, and the US after hurricanes Katrina and Nargis. They may be seen as surplus to needs and part of the answer.

What kind of investment in institutions could we make so that decision-makers wouldn't be so obdurate?
(What are the barriers? What do they feel the penalties are for acting differently? The law? Regarding the military, what are the characteristics that allow the military to act in this way? Slack?)

The discussion went in the direction of comparing the military with business. In the business world, it was noted, "the compulsion is to be efficient". On the other hand, we are less and less able to understand the organisations we work in. For example, studies have shown that CEOs expect to be surprised 20% of the time, but that staff time is planned for 100% of the time. This is obviously not sufficient, but we need to build 20% of slack (i.e excess capacity) into the organisation. A real life example of where this is done is in the military – the armed forces plan to be inefficient, because they know they will lose people in battle.

One participant added that the military has an organisational advantage here: because they expect to suffer losses, they have political support for redundancy (over-capacity). It is more difficult for other organisations. It was suggested that most (non-military) organizations deal with surprises through *prioritization*, as opposed to over-capacity.

What are the characteristics of organisations that are able to deal with surprises? How can this be applied to other organisations? What does it take for the military to act as it does?

- Excess capacity / redundancy
- Flexible resource to deal with known knowns and potentially unknowns

- Slack for reflective activity
- Learning from others
- Ability to prioritise; take resources from elsewhere; recombine resources in novel ways
- Training / drills (e.g. aircraft carrier crews train for 18 months before a 6 month mission)
- Knowing each others' skills/responsibilities/capabilities; knowing who knows and does what; capacity to do others' jobs if needed (high staff turnover is a challenge in this regard)

All of the above is costly, but builds organisational *resilience*. Neither economists nor politicians think to do these things, because they are costly and do not increase efficiency in the short term.

Organisational/institutional design has to do with people, their capability and flexibility. Authoritarian organisations, e.g. military, can make people switch jobs and responsibilities. Currently, it is often *individuals* within organisations who are being beaten up because they cannot cope with change, rather than the *organisations* taking the blame. The capacity of a system to organise people is important. One participant added that a *multi*-organisational perspective would be more relevant. This is much more complex and we need to look into this (e.g. aircraft carrier would thus be an irrelevant example).

Infrastructure is needed to re-organise after crisis, e.g. Pentagon after 9/11. After Katrina, Walmart served as call-centre; competitors came together assisting each other etc. (However, not all necessary actions were taken because both organisations and individuals were under too much stress.) In the UK, each town has a dedicated supermarket that will stay operational in case of pandemic.

A common challenge is that there is often a lack of incentive to increase capacity for dealing with surprises.

How should IRGC target this problem area?

There was general agreement that IRGC should not focus on organisational design as part of its work on emerging risks and not as a separate project, partly because IRGC has relatively limited intellectual foundation to work in this field. Some possible themes to consider were mentioned, e.g. responsiveness of organisations and the management of human error.