

Forward Resilience: Protecting Society in an Interconnected World Working Paper Series

Resilience Inside and Out: A Finnish Viewpoint

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Modern Vulnerabilities in a Hybrid Environment

In the open and interconnected economies of Europe and North America, the critical infrastructures underpinning vital societal functions and services are owned and operated by the private sector. For the last 25 years, societal infrastructures have been designed and built by private enterprises with the aim to sell a commodity and generate a maximum profit-to-investment ratio. Public policies have promoted innovation of new services and technologies to further increase efficiency, profit and convenience, and we have become accustomed to a new set of internet-based services relying on non-stop connectivity. Resilience has not been a relevant factor in this process; at best it has been a by-product of smarter technological solutions. As a consequence, the infrastructures and services upon which society relies for its vital functions are inherently vulnerable to shock and manipulation.

During this same time period, we have not faced any existential threats to our societies, political order or way of life. Until relatively recently, war in the European neighborhood had been considered practically inconceivable, and there have been no large-scale natural or other disasters with real systemic consequences.² As a consequence, we have applied a preparedness paradigm that strives to ensure full functionality of all systems and services at all times, regardless of their level of criticality. This preparedness paradigm is now being put into question by the emergence of a new and more challenging security environment.

Another element to this debate also deserves some attention. Potentially existential threats to our societies, such as a rapidly spreading pandemic with high mortality rate, a meltdown of the international financial system or a collapse of our electric grid, are not necessarily new and have not emerged as a direct result of the new security environment. They are threats that have been

¹ The views and opinions expressed in the following text are those of the author himself, and do not reflect those of the Ministry for Foreign Affairs of Finland.

² The 9/11 terrorist attacks were large-scale and did have a significant impact on the political landscape and policies on the United States, with direct consequences for the rest of the world. However, they did not threaten the existence of the U.S. public order, population or economy. Also, the ongoing large-scale migration into Europe has had significant economic and political impact on several European countries and on the EU, but it does not present an existential threat, although there are those who would prefer us to believe so.

around for a long time and that have become even more complex because of changes in the structure of our societies and economies. We have consciously paid too little attention to such threats, because mitigating them and preparing for their consequences cost much more than we are willing to pay. One needs only to consider the financial crisis in 2008 or the reaction to the Ebola outbreak in 2014, before it was evident that the virus was not airborne, not to mention the potential consequences of climate change, to realize that the truly existential threats are the ones we are least prepared for, despite the fact that we can see them coming.

What is new is that we are faced with an adversary who has the capability, knowledge and will to use all vulnerabilities to gradually debilitate the political system, society and economy of its opponents. In an article titled *The Value of Science in Prediction* published in 2013, Valery Gerasimov, Chief of the General Staff of the Russian Federation, makes the case of promoting non-linear or asymmetric (hybrid) warfare to achieve political and strategic goals:

"The very "rules of war" have changed. The role of nonmilitary means of achieving political and strategic goals has grown, and, in many cases, they have exceeded the power of force of weapons in their effectiveness. The focus of applied methods of conflict has altered in the direction of the broad use of political, economic, informational, humanitarian, and other nonmilitary measures — applied in coordination with the protest potential of the population. All this is supplemented by military means of a concealed character, including carrying out actions of informational conflict and the actions of special-operations forces. The open use of forces — often under the guise of peacekeeping and crisis regulation — is resorted to only at a certain stage, primarily for the achievement of final success in the conflict."³

As we are now acclimatizing to this new security environment, we must refocus our preparedness efforts on the most pressing vulnerabilities, and accept that we cannot protect all systems and services at all times. A new resilience paradigm must be based on the fundamental notion that *society will survive, but not necessarily remain intact*. In case of a severe crisis, there will be situations where some functions and services will cease to exist, to our collective inconvenience. This must not only be accepted policy, it must also be communicated to the population, both to prevent false expectations that may undermine public confidence, and to increase personal resilience.

Five Steps to Enhanced Resilience

After accepting that we are not as resilient as we would like and that something needs to be done about it, I would argue that there are five fundamental tasks to fulfil to enhance the civil preparedness of our societies.

The first step is to establish a comprehensive and honest list of the most dangerous vulnerabilities in our individual societies. These vulnerabilities will vary from country to country, depending on their size, economy, military etc.

³ Gerasimov doctrine, in *Military-Industrial Courier* February 27, 2013 (translation by Rob Colson, RFE/RL, <https://inmoscowsshadows.wordpress.com/2014/07/06/the-gerasimov-doctrine-and-russian-non-linear-war/>).

Second, there is a need to identify which functions are truly vital for society to exist, and the infrastructures and systems upon which these functions rely. This step also involves being able to agree that all other functions are not vital, and therefore not prioritized.

Third, cooperative agreements with the owners and operators of these infrastructures and service providers are necessary to guarantee access in times of crisis, as well as an acceptable level of preparedness beyond *force majeure*.

Fourth, where possible, the public sector must invest in hardening the existing structures to enhance their resilience.

Fifth, where hardening isn't possible, the public sector must create backup systems upon which society can rely should the primary systems break.

These tasks require clarity of purpose, ability to cooperate across the entire public spectrum, political will, and resources. Failure to meet these tasks means that we are unprepared in the face of large-scale disasters, even the non-existential ones. Furthermore, we are defenseless against an adversary who actively seeks to exploit vulnerabilities in our societies in order to paralyze us and coerce us to his will. Seen from this perspective, maintaining a decent level of civil preparedness is as important as maintaining a capability for military defense.

The Case of Finland

Finland applies a whole-of-government and -society approach to civil preparedness, which draws its functionality and strength from the small size of the administration, economy and civil society, the relatively high patriotic sentiment among the general population, as well as the conscription-based territorial defense system. The approach is known as the comprehensive security model, and is presented in the Government Resolution for the Security Strategy for Society.⁴ Senior decision-making is of course up to the government, supported by parliament, but a large amount of decisions are delegated to competent authorities. This means that in a crisis situation, the ministry responsible for the function within which the crisis has erupted takes a leading role on the response, while other authorities assist as appropriate. The practical activities related to comprehensive security is coordinated by the Security Committee, consisting of the permanent secretaries of all government ministries, the general directors of the key government agencies, the military, as well as representatives of the private sector and civil society, as appropriate.

The Security Strategy for Society identifies seven strategic tasks that need to be fulfilled under all circumstances, and allocates the responsibilities for these to all relevant government authorities. The tasks are:

Management of government affairs, meaning guaranteeing the functioning of the government, maintaining activities in and with the EU, government communications, situation picture, securing rule of law and the ability to hold elections.

⁴ Security Strategy for Society, Government Resolution 16.12.2010 (<http://www.yhteiskunnanturvallisuus.fi/en/materials>).

International activity, meaning maintaining contacts to foreign states and key international actors, protecting and assisting Finnish citizens abroad and at home, securing foreign trade, maintaining the ability to conduct comprehensive crisis management (military and civilian) as well as disaster response.

Finland's defense capability, including military defense and support to and from other authorities.

Internal security, guaranteeing protection under the law, maintaining public order and security, emergency services and maritime search and rescue, flood risk management and dam safety, emergency response functions, oil, and chemical spill response, border management, immigration control and the ability to manage large-scale influx of asylum seekers.

Functioning of the economy and infrastructure, acquiring and allocating financial resources, maintaining the financial system and money management, insurance services, securing the fuel supply, electric power supply, information and communications systems, state administration IT functions, service systems and information security, warning and alert systems, continuation of transports, food supply (primary production, processing and distribution), water supply, critical industries and services, housing, labor force, education and research system, environmental monitoring as well as waste management.

The population's income security and capability to function, meaning income security, social and healthcare services, availability of medical supplies and equipment, as well as detection, surveillance and management of health risks.

Psychological resilience to crisis, including education, cultural identity and heritage, and religious services.

A revised Strategy is due in spring 2017. The revised Strategy will further define the tasks and responsibilities of the different authorities, and also accentuate the roles and importance of the private sector and civil society in crisis situations.

As an example, the civil protection system in Finland, maintained by the Ministry of the Interior, involves an extensive system of public shelters that covers the entire population. The construction sector is required by law to include sheltering facilities in all new residential buildings.

Security of supply is another fundamental part of Finnish preparedness.⁵ The level of security of supply in Finland is set by a government decree, most recently issued in 2013 and set to be reviewed in 2018, to take into account recent changes in the security environment.

The National Emergency Supply Agency, an agency under the Ministry of Employment and the Economy, is primarily responsible for security of supply. For this purpose, it administers a security

⁵ The Finnish concept of security of supply covers a broad range of activities the ability to secure the continuity of economic activities and the functioning of the technical infrastructure vital for the livelihood of the population, for the economy and for national defense (see <http://www.nesa.fi/security-of-supply/>).

of supply fund which draws resources from a small levy on all forms of energy consumption in Finland. This fund finances the operations required for maintaining the levels set in the government decree. Systematic investments both in hardening infrastructure, systems redundancies and strategic stockpiles, made over the last seven decades, add up to a sizable safeguard, adding resilience against sudden shocks. At the same time, structural changes in both the society and economy during the last two decades have added several new challenges which require further action.

The private sector is actively involved in business continuity management through the National Emergency Supply Organization, supported by the agency carrying the same name. This organization maintains a wide network of branch-specific cooperative pools where businesses and authorities share situational awareness and preparedness-related information. Although there are signs of a tendency, particularly for multinational and foreign-based companies with few ties to the host country, to distance themselves from preparedness activities due to the (relatively small) costs they incur, these effects are so far limited.

In sum, the Finnish comprehensive security system strives to meet the five fundamental tasks through a set of tools, including a whole-of-government approach with a shared situational awareness and minimum preparedness standards, a periodic review of the vital functions in the Security Strategy or Society, a public-private partnership council involving key enterprises, as well as investments in hardened systems and free-standing backup systems through targeted investments.

Can Resilience be Projected?

A resilient society has built-in redundancies. It is robust, resourceful, responsive and able to recover quickly. Resilience is as much a quality as a construct – it is not just about building it or planning it, it also must be kept alive and nurtured. This requires constant adaptation, improvement and willingness to learn. Resilience is also an ability to accept that not everything can be protected against every threat, but that there will be functions and services that will not be maintained in crisis. Also, the presence of corruption in a political system negates any efforts towards increasing resilience, as these can be circumvented by simple cash.

Resilience is based on the characteristics and qualities of its host society, which vary from country to country in a way that makes it nearly impossible to think of a one-size-fits-all model for resilience.

Nevertheless, it is essential to think about resilience from a broader perspective, due to cross-border dependencies that link open and interconnected economies. Particularly countries with small economies and low self-sufficiency are bound to engage in dialogue with neighbors and regional partners to protect economic flows and thereby ensure access to vital goods and services. This in turn requires a common understanding of threats and vulnerabilities, and the need to mitigate them. I think it is safe to say that national measures alone will not suffice to ensure national resilience. International collaboration is required. At the same time it is important to state that international cooperation under no circumstances can replace national resilience measures. Resilience will always, first and foremost, be a national responsibility.

NATO's Civil Emergency Planning Committee has adopted a set of seven baseline requirements for civil preparedness that together constitute an alliance-wide minimum standard of resilience. This standard can be applied by any country, not just Alliance members, and indeed NATO has decided to share the baseline requirements with some of its partners.

NATO's baseline requirements and resilience guidelines are presented in more detail by Lorenz Meyer-Minnemann in his chapter in this book. This work is an excellent example of how resilience can be projected over a large number of very different societies, economies and state structures. It is of course up to individual countries to ensure that this minimum standard is met. For this purpose, I would argue that, for the European theatre, a concerted effort between NATO as the standard-setting body, the European Union as the regulative body with an ability to offer significant financial support, and the nations as implementing bodies, would have the most potential for success in raising the overall level of resilience.