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EXPERIMENTING TOWARDS CIVIL SOCIETY RESILIENCE

Dr Wolf Engelbach[1], Christian Kloyber[2], Eric Rigaud[3], Willi Wendt[4]

[1] *wolf.engelbach@iao.fraunhofer.de*
Fraunhofer-Institut für Arbeitswirtschaft und Organisation IAO,
Nobelstr. 12, 70569 Stuttgart (Germany)

[2] *christian.kloyber@research.roteskreuz.at*
Austrian Red Cross Research, Wiedner Hauptstrasse 32, 1040 Vienna (Austria)

[3] *eric.rigaud@mines-paristech.fr*
MINES ParisTech, PSL Research University, Centre de recherche sur les risques et les crises CRC, CS 10207 rue Claude Daunesse, 06904 Sophia Antipolis (France)

[4] *willi.wendt@iat.uni-stuttgart.de*
Universität Stuttgart, Institut für Arbeitswissenschaft und Technologiemanagement IAT,
Nobelstr. 12, 70569 Stuttgart (Germany)

Abstract

Civil Society Resilience is an area of crisis management that is complementary to professional response. Crisis managers and response organizations need to integrate individuals, communities and local governments in their management efforts, among others by efficient crisis communication via media and the mobilization and handling of citizens as spontaneous volunteers. DRIVER aims at a campaign of experiments: organizational concepts and IT-solutions will be iteratively tested and assessed under realistic conditions to understand and improve their operational benefits.

Therefore, this paper outlines the DRIVER approach of addressing the civil society in the context of resilience towards crisis situations. This does not only include a society oriented definition of local resilience as well as an introduction into the DRIVER perspectives of the society to be included in the DRIVER framework, rather it will be explained how DRIVERs consecutive experimentation approach supports the sustainable development of local societal resilience.

Keywords: crisis management, resilience, civil society, experimentation, individual, community, local government, crisis communication, spontaneous volunteer

1 INTRODUCTION AND MOTIVATION

Crisis management is an ever evolving challenge, not only globally, but also within Europe. Hazards change, among others due to climatic change, and other vulnerability patterns evolve, e.g. by new settlements and higher population density within cities. Further, the digitalization of the society creates new options for cooperation, but at the same time new threats by failure or misuse. Within societies new mobility concepts and socio cultural changes lead to new and diversified forms of responsibility and flexibility, which are increasingly important to be reflected in crisis management strategies.

European crisis management capabilities already form a mature and competent System-of-Systems: a federation of heterogeneous and loosely coupled local, regional and national systems able to collaborate in varying configurations and with different levels of interoperability. Radical changes to these capabilities would be very costly and likely to induce an unacceptable loss of capabilities during a long transition phase.

Further, crisis management is not only a matter of dedicated first responders, it also involves spontaneous reactions, community engagement and civil institutions,

contributing to complex and situation specific adapted response activities. In the EU security demonstration project DRIVER we therefore consider Civil Society Resilience as an area of crisis management complementary to professional response in order to anticipate the crisis, reduce its impact and recover from the effects. This requires changing the crisis management attitude and concepts as well as organisation and information systems.

DRIVER aims to improve the crisis management in Europe and its uptake of innovative solutions. Since its initiation in May 2014 it also started with the development of a pan-European test-bed enabling the benchmarking of new crisis management solutions and thereby facilitating capability development through the provision of respective methodologies and infrastructure. All developed solutions of the DRIVER project will be consecutively tested in this environment, including solutions for civil society resilience. The clear scope of DRIVER is on Europe, assuming to have a basic level of infrastructure, governance and education compared to developing countries. Moreover, resilience culture and discussion can differ from experiences in the US or Australia.

2 HISTORIC COMPONENTS TO DEFINE CIVIL SOCIETY RESILIENCE

Resilience is an integrative concept that became prominent in 21st century scientific thinking and on the political agenda. It encompasses two main ideas: response to stressful events and sustainability of systems in coping with stressful events [1]. There is no consensus on a common definition of system resilience. Resilience is sometimes considered a process, a characteristic of system, a dynamic of development, an outcome, and sometimes all of the above [2]. Resilience is applied to many systems. In DRIVER resilience relates to the crisis management domain, and within the SP3 of DRIVER it narrows down to the involvement of civil society in crisis management.

A current definition of civil society is a combination between two perspectives. The first one is the “area related” perspective where civil society refers to a space for social action that is located between the state, the economy and the private sphere, characterized by a high degree of social self-organisation in which the actors are a social movement and non-governmental organisations. The second one is the “action related” perspective, focusing on the normative assumptions concerning the quality of social actions in the establishment and stabilization of democracy, in the regulation of democratic self-governance and the development of democratic learning process [3].

Disaster resilience can be defined as the capability to prepare for, prevent, protect against, respond to or mitigate any anticipated or unexpected significant threat or event, including natural disasters or terrorist attacks, to adapt to changing conditions and rapidly bounce back to a normal or a “new normal”, and reconstitute critical assets, operations and services with minimum damage and disruption to public health and safety, the economy, environment and national security [4]. This comprehensive definition requests a specification for capable actors and responsibilities. In DRIVER SP3 we understand disaster resilience as a property of a region of any scale, or an entity such as an individual, a community or an organisation. Such regions and entities can be affected by a large diversity of hazards (economic, environmental, geopolitical, societal and technological, etc.) and thus need a generic coping capacity besides hazard specific strategies.

Community and organisation differ in their level of formal structures, but there are not necessarily clear boundaries between them. Both community resilience and organisational resilience can be defined as “the intrinsic ability of a system to adjust its functioning prior to, during, or following changes and disturbances, so that it can sustain required operations under both expected and unexpected conditions” [5] or as the “ability to recognize and adapt to handle unanticipated perturbations that call into question the model of competence, and demand a shift of processes, strategies and

coordination" [6]. Therefore, organisational resilience integrates business continuity [7]. However, the scope of DRIVER SP3 is not primarily on resilience of organisations, but on contributions of organisations to the resilience of a region in crisis management.

From an analysis of the different meanings related to resilience of individuals, ecological systems and organisations, the following key characteristics of a resilient system can be concluded for both the contribution of civil society to disaster resilience and the resilience capacity of individuals and organisations:

(1) Resilience is about a system's capacity to respond to or cope with unwanted respectively unexpected situations as well as overcoming them. Therefore, system adaptations are necessary quite often, including a broad set of possible transformations.

(2) Resilience is a question of culture. Confronted with the same situation, some people consider it as a threat and others as an opportunity. Likewise, the resilience of a system can be estimated differently, depending on the perspective of the actor.

(3) Moreover, interactions between the different scales (individual, group, organisation, territory, etc.) have to be considered when defining resilience. A resilient performance at one level may affect the performance at another level negatively.

3 A FRAMEWORK FOR CIVIL SOCIETY RESILIENCE

This civil society resilience framework has the purpose to outline the scope of DRIVER SP3 and the aspects tackled by its activities. The civil society dimension of crisis management addresses the contribution of relevant players outside professional crisis management to resilience and how they can be supported by organisational as well as IT solutions, what includes interlinks and shared responsibility between the civil society and the professional response forces. The local government is understood as one important player especially with its non-crisis-management activities and as a managing organisation for citizens' engagement. At the core of this interpretation of civil society lies a relationship where the activities of crisis management experts who aim to address or activate non-crisis-management entities are intrinsically tied to the capabilities and contributions of the non-crisis management civil society actors.

We assume that resilience has two complementary dimensions, being a status of a system and also a process to become more able to anticipate, reduce, cope and recover. Both dimensions are influenced by many factors that cannot be completely controlled. Thus, it is always relevant to clearly state the assumed context conditions for solutions and experiments and to be careful with generalisations. This framework provides a common ground, but cannot address specific crisis situations or the conditions in one country. Even within one state, the civil society is heterogeneous in many dimensions, such as education, language, political believes, religious traditions, family relations and social activities. Solutions in SP3 thus should reflect if and how they can be aware of or adapted to the cultural context of sub-groups in society, among others related to their risk perception.

Civil society resilience in the crisis management context refers to the resilience of actors outside the professional response such as individuals, communities or cities. Complementary the term societal resilience constitutes an overarching concept that refers to the value-dimension of society as a whole. In that sense positive and negative societal implications of civil society resilience solutions can be assessed. Already without any major disaster, each society is constantly evolving, has a dynamic character and is permanently transforming. Thus there cannot be an ideal status with regards to resilience, which should be achieved or conserved. However, organisational

memory and a common culture are important to stabilize a society and support the involvement of people. In that respect, it is also relevant to consider non-citizens (e.g. refugees, tourists and transients) as a relevant group for resilience improvement strategies since they are often less integrated and specifically vulnerable.

SP3 is experimentation driven and thus needs to concentrate on some core challenges. This covers only part of the overall civil society resilience arena, since for example the role of educational systems, companies or infrastructure providers is not addressed (compare Fig. 1). The solutions developed and tested within this framework will be derived from existing concepts and tools within EU research and crisis management activities. The solutions should lead to adaptive capacities of the system that allow coping and overcoming unwanted situations. Within the DRIVER experiments they should be tested in different contexts and against scenarios, which describe unwanted situations and thus allow challenging the generic resilience capacities.

Fig. 1: Civil Society Resilience Framework

4 SELECTED ASPECTS FOR CIVIL SOCIETY RESILIENCE

In order to help crisis managers and response organizations to understand and guide these developments and to integrate them in their management efforts optimally, DRIVER addresses three levels of society's organization:

(1) Individuals: Each individual, including affiliated volunteers, perceives risks differently and behaves accordingly in crisis situations. The specific psycho-social crisis dynamics are addressed by dedicated training kits, which are tested under different conditions.

(2) Communities: Communities are complex compositions of individuals which share common traits such as location or identity and are therefore a

fundamental element in building resilience within a society. Based on assessments and simulations, DRIVER provides recommendations for measuring and strengthening community engagement before and during crisis.

(3) Local governments: Cities and regional authorities are not only involved in professional crisis management, they can also foster actions, decisions and processes to support local civil society resilience. With this intention, DRIVER suggests self-assessment methodologies as well as communication processes involving different local stakeholders.

Additionally DRIVER focuses on two themes within the target groups: Crisis communication via media and the mobilization and handling of citizens as spontaneous volunteers. The first aims at optimizing the communication management between citizens and critical stakeholders (specifically media and public policy makers) before, during and after a crisis to ensure comprehensive, understandable and fast information delivery. Regarding people that have not been trained for disaster management, DRIVER tests and improves strategies to organize and coordinate unaffiliated individuals and civil groups.

5 EXPERIMENTATION APPROACH IN CIVIL SOCIETY RESILIENCE

DRIVER being a demonstration project aims at a campaign of experiments that increases in complexity, e.g. covering first one and then more of the above-mentioned topics. Organizational concepts and IT-solutions will be iteratively tested and assessed under realistic conditions to understand and improve their operational benefits.

This aims for a better evidence-base for crisis management capability investment decisions. However, the complexity of crisis management makes it hard predicting analytically the potential benefits of new solutions and approaches, particularly considering the wide scope of potentially relevant contingencies. Therefore the DRIVER approach will test, benchmark and evaluate the proposed solutions in close to real environments with real users in the context of their actual legacy resources.

For that both physical and virtual “platforms” as well as common guidelines for experimentation are provided to all thematic research strands of DRIVER. This shall facilitate an overarching evaluation approach with common scenarios, data, infra-structures and involved groups for different experiments. In addition, simulation, historical experience and expert judgment will be used to reflect the experiments and come up with reliable recommendations for policy and stakeholders.

5.1 The specific challenge of experimentation in SP3

The above sketched experimentation approach poses some specific challenges for SP3 as in addition to crisis management, SP3 deals with another even more complex system of systems – civil society and its actors. Actors which despite of increasing global mobility and interconnectedness remain social human beings locally embedded into specific institutional, legal, social and cultural contexts.

5.1.1 The reductionist fallacy

Civil society resilience experimentation activities must navigate through two extremes: the fallacy of methodological reductionism and the lacking explanatory power of methodological particularism. Reductionism seeks to reduce the complexity of a whole by breaking it into its smaller parts, which in isolation are simpler to explain. Thus in natural sciences experimentation serves to describe, explain and predict the relation between different constituent parts and the whole with reduction being a necessary process to isolate the effects of variables in a controlled environment.

Within the social sphere however, reductionism is confronted with the criticism that it renders the multidimensional as uni-dimensional. By isolating parts in order to study them it tends to ignore the properties of the complex whole, thus often discarding the socio-cultural context as noise and underestimating the importance of social interactions. The other extreme position sometimes found in humanities is particularism which focuses on understanding the characteristics of a group or a culture without making generalisations or comparing it to another. In that way particularism fails to explain the interconnectedness of sub-parts such as similar crisis management processes or institutional and cultural similarities among EU member states. The fact that there are huge historically derived cultural and legal differences throughout the EU member states doesn't mean that one solution originated in one member state can't be applied in another, but that it has to be adapted to the new socio-cultural context.

5.1.2 The proposed experimentation methodology

As SP3 is dealing with the multiple social interactions between crisis management actors and civil society it strives to avoid both, oversimplification deriving from reductionist fallacy and in-transferability of concepts deriving from particularism. Thus SP3 seeks on the one hand to capitalise on methodical support and physical platforms SP2 provides to the whole project. For simplicity, platforms can be imagined as crisis-management training grounds (indoor and outdoor) provided by organisations such as THW or MSB which are equipped with technical and human resources (professional responders and volunteers) for testing new crisis management solutions.

On the other hand, SP3 is well aware of the limited explanatory power of single experiments which are run in SP3 – thus the "laboratories" of SP3 are always interactive formats like expert workshops, focus groups, training events, table-top exercises or small scale field exercises. These settings facilitate the recreation of the social interactions which are inherent to crisis management processes, while enabling the researchers to observe and assess these processes.

This is achieved by following a dialectic approach combining qualitative and quantitative methodology in theory building and evaluation. Qualitative methods are used for describing the socio-cultural context of solutions and also for generating new hypothesis – an indispensable function for facilitating innovation. In SP3 experiments, methods like expert interviews or focus groups are used in initial experiments and in preparation of later table-top or field experiments. This allows understanding the context crisis management concepts and IT-solutions stem from and thus enables building hypotheses that shall be tested.

Ex-post evaluation by means of standardised questionnaires following quantitative performance indicators (e.g. percentage of people acting upon a warning or taking certain protective measures) will be complemented with qualitative methods like participant observation or oral debriefings to better capture the social interactions and the lessons learned of participating responders and civil society actors.

5.1.3 Towards a transferability approach

SP3 sees its strengths in testing innovative concepts in different socio-cultural settings and contributing to a context sensitive transferring of innovative resilience enhancement solutions among EU member states, its local governments and its population on local and community level.

Key supporting process is contextualisation, making explicit the institutional, legal and cultural context of tested solutions. This will be reached through a dialectic process of induction and deduction: solutions will be described by categories derived from other sub-projects dealing with legal and societal aspects. They originate from deducting from a comparative country studies (e.g. categories like institutional context, legal conditions, organizational cooperation) and from deduction from ethical assessments

(e.g. categories like trust, inclusiveness, openness, etc.). These categories will also be used for guiding evaluation to reach a better understanding of factors for successful transmission of ideas and solutions between different European member states.

5.2 Thematic strands of experimentation

In crisis management the relationship between societal actors and response is an asymmetrical one, with responders being regulated by an organisational and legislative framework, standard operating procedures and expert knowledge acquired through regular training in simulated and real emergency situations, while civil society actors are often not aware of the disaster risks they face, the preparative and protective measures they can take as individuals and how to support fellow members of their local communities before and during a disaster situation. The following experiments will embark on these topics:

(1) Training in psychosocial support: A strengthened individual resilience of volunteers and the population affected by crises is important for coping with the aftermath of disaster situations. Three existing psychosocial support tool kits are delivered in a new train-the-trainer cascade to trainers and responders.

(2) Community resilience: The immediate response to crisis is mainly a local one, thus preparing local communities and building up their capacities and the relationship between local actors is a key investment in enhanced community resilience. Measurement tools for comparing the resilience of communities, participatory methods for raising awareness and triggering action as well as guidelines for professionals on capitalizing on active citizens are being experimented with in different countries.

(3) Local government resilience: Cities and regional authorities are responsible for people, infrastructures and local policies which constitute society and lay the baseline for resilience. Therefore, DRIVER aims to develop a method helping local governments to assess the resilience of all relevant aspects within their territory. The experiments will focus on the evaluation of this assessment method in order to develop a tool that is adaptable by the targeted end users on governmental level as well as for all local stakeholders.

(4) Crisis communication: Informing the public is not confined to the immediate occurrence of a disaster, when people need to be informed on the hazard, protective measures and required interventions to take. Resilience of the population is very much linked on what and how it is communicated before a disaster when there is much less media attention. Target group sensitive communication of simple preparative measures is still a gap. Thus experimentation will focus on the impact of different key messages on target groups and on how to share the knowledge on simple and impactful communication with communicators – which can be local government decision makers or crisis management organisations.

(5) Organising and mobilising spontaneous volunteers: When alarmed and emotionalised by media, un-affected civil society actors often want to help posing a coordination challenge to the response. Experimentation is focused on two aspects: whether pre-configuration does make individuals and groups better prepared to assist the response and conversely minimise the efforts on side of the response to incorporate the influx of spontaneous helpers. A second aspect is focusing on the tasking of the population via a smart phone app.

6 CONCLUSIONS AND OUTLOOK

This paper outlined the DRIVER strategy to address the civil society within disaster resilience activities. Due to the high complexity of the civil society, it is necessary to develop solutions addressing the specific needs of all parts of the society and building a combining framework that allows an integrated resilience strategy.

In the next steps of the DRIVER project, the civil resilience solutions will be part of experiments in an even wider crisis management setting. For example, crowd tasking apps will be combined with IT-tools for responder collaboration, or competence frameworks used to understand the effects of psychosocial support. In two joint experiments (JE) even further combinations will be tested over an extended period along the same scenarios addressing floods and ice storms. A final demo based on a Mediterranean tsunami will then illustrate integrated approaches and consecutive solution testing in established pan-European test-beds.

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